Takayasu Arteritis and Pregnancy

1. Pregnancy Morbidities in Korean Patients with Takayasu Arteritis: A Monocentric Pilot Study

**Author(s):** Pyo J.Y.; Song J.J.; Park Y.B.; Lee S.W.

**Source:** Yonsei medical journal; Nov 2020; vol. 61 (no. 11); p. 970-975

**Publication Date:** Nov 2020

**Publication Type(s):** Article

**PubMedID:** 33107241

Available at [Yonsei medical journal](#) - from Europe PubMed Central - Open Access

Available at [Yonsei medical journal](#) - from Unpaywall

**Abstract:** We investigated pregnancy morbidities in Korean patients with Takayasu arteritis (TA) in a single tertiary hospital as a pilot study. We retrospectively reviewed the medical records of 12 pregnancies in seven patients with TA. All patients were diagnosed with TA based on the 1990 American College of Rheumatology classification criteria. The medical records of patients were well-documented, allowing review of clinical data including pregnancy morbidities. The angiographic and Ishikawa classifications at diagnosis and TA activity at delivery were assessed. Of the 12 pregnancies, two pregnancies ended in spontaneous abortion (16.7%), and one pregnancy (8.3%) had therapeutic abortion at 9 weeks due to maternal morbidity. Among the remaining nine pregnancies, only one child was delivered via normal spontaneous vaginal delivery, and the remaining eight were delivered by Caesarean section. Two out of nine (22.2%) neonates were born with low birth weight, and one of them was born at 30 weeks of gestation. The most common maternal complication was hypertension affecting 7/12 (58.3%) pregnancies. Preeclampsia occurred in one pregnancy, and gestational diabetes mellitus (GDM) occurred in two pregnancies. At delivery, disease activity of TA was stable in all pregnancies, and glucocorticoids were administered in nine pregnancies. Live birth rate of pregnant Korean patients with TA was 75%. Future studies are needed to reduce pregnancy-related complications.© Copyright: Yonsei University College of Medicine 2020.

**Database:** EMBASE
2. Pregnancy issues in Takayasu arteritis

Author(s): Comarmond C.; Saadoun D.; Cacoub P.; Nizard J.
Source: Seminars in Arthritis and Rheumatism; Oct 2020; vol. 50 (no. 5); p. 911-914
Publication Date: Oct 2020
Publication Type(s): Review
PubMedID: 32911287

Abstract: Takayasu arteritis (TAK) is a chronic inflammatory vasculitis of unknown origin affecting large vessels, predominantly the aorta and its main branches. TAK usually affects young women and the management of pregnancy during this vasculitis may be a challenging situation. After a review of the literature, we analysed the data of 505 pregnancies in 373 TAK patients. We discuss main results to clarify if the pregnancy outcome is affected by TAK, especially during disease clinical onset or disease activity. We also discuss the potential impact of pregnancy on TAK prognosis. Disease activity of TAK appears independently associated with a poor pregnancy outcome. More than 5% of pregnant women with TAK develop a life-threatening maternal cardiovascular complication. A good control of TAK disease activity and arterial hypertension before conception and during pregnancy is critical to improve both maternal and foetal outcomes. Pregnancies in the setting of TAK should be considered high-risk, requiring a close collaboration between specialists involved in the care of TAK and obstetricians. Copyright © 2020 Elsevier Inc.

Database: EMBASE

3. Takayasu's arteritis presenting in a pregnant woman with ankylosing spondylitis: Case report and review of the literature

Author(s): Mohammadi Kebar Y.; Habibzadeh A.; Nezhadseifi E.
Source: Egyptian Rheumatologist; Oct 2020; vol. 42 (no. 4); p. 329-332
Publication Date: Oct 2020
Publication Type(s): Article
Available at The Egyptian Rheumatologist - from Free Medical Journals . com
Available at The Egyptian Rheumatologist - from Unpaywall

Abstract: Introduction: Coincidence of ankylosing spondylitis (AS) and Takayasu arteritis (TA) in single person especially women is rare. Case report: We report a 31 year old Iranian woman with AS from 5 years and giving history of inflammatory low back pain, morning stiffness, bilateral sacroiliac tenderness, positive Schober test and enthesitis, negative human leucocytic antigen (HLA-B27) and sacroiliitis on plain X-ray. The patient was under treatment. After 2 years she returned with increased back, hip and enthesal pain as well as claudications in left hand during the eighth week of gestation in her first pregnancy. She discontinued the non-steroidal anti-inflammatory drugs three months before pregnancy and on examination was pulseless on the left side. Color Doppler studies showed segmental stenosis and increased intima thickness in subclavian, axillary and proximal brachial arteries of the left hand with reduced blood flow in those arteries. The right hand was normal. Laboratory result showed microcytic anemia (hemoglobin = 10.8 g/dl, mean corpuscular volume = 66 fl) and erythrocyte sedimentation rate = 104/1st hour. The findings were indicative of TA and she was treated with prednisolone and azathioprine and had successful delivery to full term normal boy at 39th week gestation by Caeserian section. She was followed for two more months after delivery with no complications. Conclusion(s): Both TA and AS have no significant adverse effects on pregnancy if diagnosed and timely treated properly. When they occur concomitantly, more attention and care is needed to prevent complications. Copyright © 2020 Egyptian Society of Rheumatic Diseases
4. Pregnancy Outcomes in Systemic Vasculitides

**Author(s):** Ross C.; Pagnoux C.; D'Souza R.

**Source:** Current Rheumatology Reports; Oct 2020; vol. 22 (no. 10)

**Publication Date:** Oct 2020

**Publication Type(s):** Review

**PubMedID:** 32845412

Available at Current rheumatology reports - from SpringerLink - Medicine

Available at Current rheumatology reports - from Unpaywall

**Abstract:** Purpose of Review: In recent years, improvements in the recognition of primary vasculitides and increased treatment options have led to greater survival rates and a better quality of life for patients. Therefore, pregnancy in women with vasculitis has become a more frequent consideration or event. Literature on pregnancy outcomes in this population has grown and allowed us, in this article, to review the effects of pregnancy on disease activity, as well as maternal and fetal outcomes for each type of vasculitides. Recent Findings: Successful pregnancies in patients with vasculitides are possible, especially when conception is planned, and the disease is in remission. The risk of vasculitis flare is highly dependent on the type of vasculitis, but overall limited. The most frequent complication associated with large-vessel vasculitis (mainly Takayasu arteritis) is hypertension and preeclampsia. Preterm deliveries and intrauterine growth restriction occur more frequently with small- and medium-vessel vasculitis. Summary: Pregnancies in patients with vasculitis should be considered high risk and followed by a multidisciplinary team with expertise in the field. Flares should be managed as in the non-pregnant population, while avoiding medications with unknown safety in pregnancy or known teratogens. Although commonly prescribed for the prevention of preeclampsia, there is limited evidence supporting the use of low-dose aspirin for pregnant women with vasculitis. Prospective registries or studies are needed, to better assess the value of aspirin, the place and long-term impact of new biologics and, to identify predictors of pregnancy outcomes other than disease status at conception.

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**Database:** EMBASE
5. Analysis of risk factors for complications and adverse obstetrical outcomes in women with Takayasu arteritis: a French retrospective study and literature review

Author(s): Abisror N.; Mekinian A.; Lahuna C.; Fain O.; Hachulla E.; Lambert M.; Morel N.; Mouthon L.; Cacouby P.; Haroche J.; Chapelon C.; Martis N.; Fuzibet J.G.; Belenotti P.; Siwader L.; Dhote R.; Guillemin L.; Le Guern V.; Costedoat-Chalumeau N.; Sarrot-Reynault F.; Andre M.; Amar S.; Gauthier J.B.; Cathebras P.; Neel A.; Vanderheynst F.; Rondeau M.; Fur A.; Renou F.; Godeau B.; Devaux B.; Veyssier-Belot C.; Pourrat O.; Maurier F.

Source: Clinical Rheumatology; Sep 2020; vol. 39 (no. 9); p. 2707-2713

Publication Date: Sep 2020

Publication Type(s): Article

PubMedID: 32206974

Available at Clinical rheumatology - from SpringerLink - Medicine

Abstract:Objective: Takayasu arteritis (TAK) is a large vessel vasculitis affecting young women of childbearing age. The outcome of pregnancies in TAK patients, factors associated with maternal and foetal complications and adverse outcomes were analysed. Method(s): All pregnancies in women with a TAK diagnosis were retrospectively included from 20 French hospitals providing care for TAK, until August 2015. Result(s): The study consisted of 43 pregnancies in 33 women, including 29 with a pre-existing TAK diagnosis and 4 diagnosed during pregnancy. Complications were observed in 20 pregnancies (47%), including 35% with arterial hypertension (n = 15), 9% with pre-eclampsia (n = 4), 2% with HELLP syndrome (n = 1) and 14% with intrauterine growth restriction (IUGR, n = 6, leading in one case to a medically indicated termination of pregnancy). There were 42 live births (98%) at a median term of 38 [27-42] weeks gestation including 9 before 37 weeks (21%). The median birth weight was 2940 [610-4310] grams. Five children (12%) required transfer to a neonatal intensive care unit. One premature boy (27 weeks gestation) died after 2 days. Treatment during pregnancy included steroids (n = 25/43; 58%), azathioprine (n = 9/43; 21%) and infliximab (n = 1/43; 2%). The risk of developing arterial hypertension during pregnancy was associated with previous chronic arterial hypertension and with an infra-diaphragmatic vasculitis injury (P = 0.01 and P = 0.04, respectively). No correlation was reported between TAK activity and any of the obstetrical complications described in the study. Conclusion(s): This study showed a high rate of adverse obstetrical complications without significant impact on live birth rates. Pregnancy did not appear to influence TAK disease activity.

Key Points* We observed a high rate of adverse obstetrical complications in women with Takayasu arteritis; however, the rate of live births was high. Pregnancy did not appear to influence TA disease activity.

Database: EMBASE
6. Anesthetic Management of Emergency Cesarean Delivery Followed Immediately by Thoracic Endovascular Aortic Repair for a Peripartum Dissecting Aorta Aneurysm With Impending Rupture (Stanford Type B Dissection) in a Pregnant Patient With Takayasu’s Arteritis

**Author(s):** Kikuchi Y.; Kuroda M.; Saito S.

**Source:** Journal of Cardiothoracic and Vascular Anesthesia; Jul 2020; vol. 34 (no. 7); p. 1897-1901

**Publication Date:** Jul 2020

**Publication Type(s):** Article

**PubMedID:** 31937478

**Database:** EMBASE

7. Pregnancy and Takayasu arteritis: case-based review

**Author(s):** Bharuthram N.; Tikly M.

**Source:** Rheumatology International; May 2020; vol. 40 (no. 5); p. 799-809

**Publication Date:** May 2020

**Publication Type(s):** Review

**PubMedID:** 31858208

Available at Rheumatology international - from SpringerLink - Medicine

**Abstract:** Takayasu arteritis (TA) is a rare large vessel vasculitis that particularly affects women of child-bearing age. Management of pregnant patients with TA is often challenging due to the cardiovascular and cerebrovascular complications of the disease. We report two new cases of pregnancy in patients with TA and review all published cases from sub-Saharan Africa. Analysis of 16 pregnancies in 15 patients (including our two cases) showed that seven patients had radiographic Type V TA disease, namely involvement of the entire length of the aorta. Four patients were newly diagnosed with TA during pregnancy and two pregnancies were unbooked at time of first presentation. Seven pregnancies were complicated by disease flares (n = 4) and/or hypertension (n = 6). Four pregnancies resulted in preterm delivery and six required caesarean sections. There was one documented case of pre-eclampsia resulting in the only maternal death. Intrauterine growth restriction was documented in two of six pregnancies in which foetal ultrasonography was performed. There were four low birth weight infants and one fresh stillbirth (associated with the maternal death). In the handful of case reports of pregnancy in TA from sub-Saharan Africa, both maternal and foetal outcomes were generally good and similar to international findings. In a substantial proportion of patients, the diagnosis of TA was made in pregnancy, reflecting challenges of access to appropriate health care in resource constrained sub-Saharan Africa. Copyright © 2019, Springer-Verlag GmbH Germany, part of Springer Nature.

**Database:** EMBASE
8. Obstetric and perinatal outcomes in pregnant women with Takayasu’s arteritis: single centre experience over five years

**Author(s):** David, Liji Sarah; Beck, Manisha Madhai; Kumar, Manish; Rajan, Sudha Jasmine; Danda, Debasish; Vijayaselvi, Reeta

**Source:** Journal of the Turkish German Gynecological Association; Mar 2020; vol. 21 (no. 1); p. 15-23

**Publication Date:** Mar 2020

**Publication Type(s):** Journal Article

**PubMedID:** 31564080

Available at [Journal of the Turkish German Gynecological Association](https://journals.tug.de/index.php/tfgga) - from Europe PubMed Central - Open Access

Available at [Journal of the Turkish German Gynecological Association](https://journals.tug.de/index.php/tfgga) - from Free Medical Journals.com

Available at [Journal of the Turkish German Gynecological Association](https://journals.tug.de/index.php/tfgga) - from ProQuest (Health Research Premium) - NHS Version

Available at [Journal of the Turkish German Gynecological Association](https://journals.tug.de/index.php/tfgga) - from Unpaywall

**Abstract:** Objective To study obstetric and perinatal outcomes among pregnant women with Takayasu arteritis (TA), attending our hospital for pregnancy and childbirth between January 2011 to December 2016.

**Material and Methods** Retrospective study was carried out by abstracting clinical charts on all pregnant women with TA who underwent antenatal care and/or delivery in our hospital during this period. American College of Rheumatology criteria was used for diagnosis of TA. Sixteen women with TA were included in the study. Maternal demographic data, stage of disease, complications related to disease, details of treatment taken prior to pregnancy, pregnancy outcomes, and neonatal outcomes were studied.

**Results** Forty-four percentage (7/16) belonged to type 5 angiographic type, however the same proportion (7/16) had undergone surgical corrections prior to pregnancy and the majority (15/16) were on medical management. Only three women (19%) were diagnosed during pregnancy. Most did not have active disease measured by Kerr’s criteria (n=12; 75%), and Indian Takayasu clinical activity scores A. Chronic hypertension was the commonest antenatal complication (56.2%), nearly one-third had growth restricted babies and 25% had preterm labour. There were no cardiovascular events, no maternal deaths, nor fetal or neonatal deaths. Two-thirds of our women were delivered by caesarean section.

**Conclusion** Preconceptional counselling is of paramount importance in women with TA. Good maternal and fetal outcomes are observed with close antenatal surveillance and multidisciplinary care. Pregnancy should be planned during disease remission, with good antenatal care, close monitoring of clinical symptoms, early diagnosis and treatment of complications.

**Database:** Medline
9. Poor obstetric outcomes in Indian women with Takayasu arteritis.

Author(s): Gupta, Latika; Misra, Durga Prasanna; Ahmed, Sakir; Jain, Avinash; Zanwar, Abhishek; Lawrence, Able; Agarwal, Vikas; Aggarwal, Amita; Misra, Ramnath

Source: Advances in rheumatology (London, England); Mar 2020; vol. 60 (no. 1); p. 17

Publication Date: Mar 2020

Publication Type(s): Journal Article

PubMedID: 32164787

Available at Advances in rheumatology (London, England) - from BioMed Central

Available at Advances in rheumatology (London, England) - from Unpaywall

Abstract: Takayasu’s arteritis (TA) affects young women in the childbearing age group. We studied obstetric outcomes in these patients before and after disease onset. Women aged more than 18 years with Takayasu’s arteritis (ACR 1990 criteria) were included. Demographic data, clinical features, disease activity using Indian Takayasu Arteritis clinical score (ITAS), Disease Extent Index for TA (DEI.TaK) and damage assessment using TA Damage score (TA), history of conception and maternal and fetal outcomes were recorded from hospital records and telephonic interview. Results are in median and IQR.

RESULTS Of the 64 women interviewed, aged 29 (24-38) years and disease duration 5 (4-10) years, 74 and 38 pregnancies had occurred before and after disease diagnosis in 29 and 20 women respectively. In eight, the diagnosis was made during pregnancy. Age at disease onset was 22 (18-30) years. Type 5 disease was the most common (n = 32, 59.3%), and an equal number of patients had Ishikawa’s class I and II disease (n = 26, 40.6%). Median ITAS (n = 44) was 13 (7-16), DEI.Tak 12.5 (9-16.75) and TADS 8 (6.5-10). Twenty-five patients wanted to get pregnant, of which 8 (32%) did not do so because of their disease. Fifteen were unmarried of whom 6 did not marry due to disease. Obstetric outcomes were poorer in pregnancies that occurred after the onset of disease as compared with those before it (RR = 1.5, p = 0.01). Pregnancies after the onset of TA carried a very high risk of maternal [RR3.9 (1.8-8.5), P < 0.001] as well as fetal complications [RR = 2.0 (1.2-3.4), p = 0.001]. Hypertension was the most common maternal complication and occurred most often in the last trimester. The baby weight at birth was lower in pregnancies after disease (2.3 vs. 3.0, p = 0.01). Wong’s score greater than or equal to 4 predicted lower birth weight (p = 0.04). ITAS, ITAS-A, DEI. Tak and TADS could not predict obstetric outcomes, and ITAS score exhibited moderate correlation with DEI. Tak (r = 0.78) and TADS (r = 0.58).

CONCLUSION: Women with TA suffer from extremely high risk of poor maternal and foetal outcomes. Wong’s scoring can be useful to predict birth weight.

Database: Medline
10. Enlarging aneurysm of the ascending aorta in a pregnant woman with Takayasu arteritis

**Author(s):** Bartczak-Rutkowska A.; Trojnarska O.; Cieplucha A.; Janus M.; Lesiak M.; Jemielity M.

**Source:** Kardiologia Polska; Jan 2020; vol. 78 (no. 1); p. 82-83

**Publication Date:** Jan 2020

**Publication Type(s):** Short Survey

**PubMedID:** 31724561

Available at Kardiologia polska - from Unpaywall

**Database:** EMBASE


**Author(s):** Dalkilic, Ediz; Coskun, Belkıs Nihan; Yağız, Burcu; Pehlivan, Yavuz

**Source:** International journal of rheumatic diseases; Oct 2019; vol. 22 (no. 10); p. 1941-1944

**Publication Date:** Oct 2019

**Publication Type(s):** Letter Case Reports Review

**PubMedID:** 31482664

Available at International journal of rheumatic diseases - from Wiley Online Library

**Database:** Medline


**Author(s):** Chung, Edmund Yin Man; Tiku, Anushree; Seeho, Sean; Mather, Amanda

**Source:** Journal of medical case reports; May 2019; vol. 13 (no. 1); p. 115

**Publication Date:** May 2019

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 31039808

Available at Journal of medical case reports - from BioMed Central

Available at Journal of medical case reports - from SpringerLink - Medicine

Available at Journal of medical case reports - from ProQuest (Health Research Premium) - NHS Version

Available at Journal of medical case reports - from Unpaywall

**Abstract:** Background: Hypertension is common in pregnant women presenting with aortic coarctation or Takayasu's arteritis. Uncontrolled hypertension leads to increased adverse maternal and neonatal events. Case Presentation: A 36-year-old gravida 2, para 1, Caucasian woman presented at 9 weeks of gestation with headaches but normal blood pressure. She had a past medical history of an in vitro fertilization pregnancy complicated by pre eclampsia at 27 weeks of gestation (birth weight 1900 g) and infrarenal aortic stenosis. In the current pregnancy, she received aspirin and calcium as preeclampsia prophylaxis, remained normotensive throughout pregnancy, and was delivered by elective cesarean section at 37 weeks without complications. Conclusion: This case demonstrates a significant chronic aortopathy in pregnancy with normal fetal growth and uterine blood flow through collateral supply from the internal mammary and epigastric arteries.

**Database:** Medline

**Author(s):** Tanacan, Atakan; Unal, Canan; Yucesoy, Halise Meltem; Duru, Sinem Ayse; Bekas, Mehmet Sinan

**Source:** Archives of gynecology and obstetrics; Jan 2019; vol. 299 (no. 1); p. 79-88

**Publication Date:** Jan 2019

**Publication Type(s):** Evaluation Study Journal Article

**PubMedID:** 30302544

Available at Archives of gynecology and obstetrics - from SpringerLink - Medicine

Available at Archives of gynecology and obstetrics - from ProQuest (Health Research Premium) - NHS Version

**Abstract:**

**PURPOSE** To evaluate the clinical characteristics, obstetric/neonatal outcomes, and pregnancy complications of pregnant women with Takayasu arteritis (TA).

**METHODS** We retrospectively evaluated the data of 22 pregnancies of 11 patients with TA between January 1 2000, and December 31 2017. Patient characteristics, severity of disease, obstetric outcomes, pregnancy complications, mode of delivery, and neonatal outcomes were evaluated.

**RESULTS** Based on the angiographic classification, four, two, one, three, and one patient were classified into groups I, IIa, III, IV, and V, respectively. Based on Ishikawa criteria, five, two, two, and two patients were classified into groups 2a, 1, 2b, and 3, respectively. Sixteen and five pregnancies resulted in live births and spontaneous abortion, respectively. One pregnancy was terminated due to prenatally diagnosed trisomy 21. Relapse of TA was observed in five pregnancies. Mean age at diagnosis was 24.54 ± 6.23 years, and mean age at conception was 30.30 ± 4.80 years. There were two multiple pregnancies (one twin and one triplet) and 19 newborns were delivered alive. Rates of hypertensive disorders of pregnancy, preterm birth, intrauterine growth retardation, oligohydramnios, and intrauterine fetal demise were 36.4, 18.2, 13.6, 13.6, and 0%, respectively. Mean gestational age at birth was 37.25 ± 2.40 weeks and mean birthweight was 2682.10 ± 176.82 g. Median APGAR score was 8. Cesarean section rate was 50%. Regional anesthesia/analgesia was administered during 62.5% of the deliveries. Ten neonates were admitted to neonatal intensive care unit and eight neonates had neonatal respiratory complications.

**CONCLUSION** Appropriate management of pregnant women with TA within the framework of antenatal care programs and adopting a multidisciplinary approach are key to ensure successful outcomes.

**Database:** Medline

**Author(s):** Kassa, Mamo Woldu; Benti, Tadele Melese; Bedada, Alemayehu Ginbo

**Source:** The Pan African medical journal; 2018; vol. 30; p. 281

**Publication Date:** 2018

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 30637066

Available at The Pan African medical journal - from Europe PubMed Central - Open Access

Available at The Pan African medical journal - from Free Medical Journals . com

Available at The Pan African medical journal - from Unpaywall

**Abstract:** Takayasu's arteritis (TA) is a rare chronic inflammatory disease affecting mainly the aorta and its main branches. We report a case of a 24-year-old primigravida, an African patient, with TA planned for caesarean section at 37 weeks of gestation. Clinically, she has involvement of aortic arch and its branches and abdominal aorta. She underwent caesarean section and delivered an alive baby boy under successful spinal anaesthesia with insignificant complications. Although it is rare in the African continent, anesthesiologists should be up-to-date with the knowledge of perioperative anesthetic management of TA in pregnant cases requiring operative delivery.

**Database:** Medline


**Author(s):** Kirshenbaum, Michal; Simchen, Michal J

**Source:** The journal of maternal-fetal & neonatal medicine : the official journal of the European Association of Perinatal Medicine, the Federation of Asia and Oceania Perinatal Societies, the International Society of Perinatal Obstetricians; Nov 2018; vol. 31 (no. 21); p. 2877-2883

**Publication Date:** Nov 2018

**Publication Type(s):** Journal Article Review

**PubMedID:** 28738750

**Abstract:** OBJECTIVE The objective of this study is to investigate the clinical features of pregnancy in women with Takayasu's arteritis managed in a tertiary medical center and review the literature in order to establish the course and recommended follow up and treatment for these pregnancies. MATERIALS AND METHODS Retrospective analysis of 20 pregnancies in 6 women with Takayasu's arteritis. Patients were recruited from the high risk pregnancy clinics at Sheba Medical Center, where follow up included strict control of blood pressure and treatment of obstetric and disease-related complications. RESULTS Mean maternal age was 29.3 ± 3 years. Thirty-six patients had both supra and infradiaphragmatic arterial disease, of them two had an abdominal aorta involvement and three out of six patients had an isolated supradiaphragmatic disease. Of 20 pregnancies, six pregnancies (30%) resulted in early spontaneous miscarriages, and one pregnancy was terminated at 17 weeks due to fetal anomalies. The remaining 13 pregnancies (65%) resulted in live births. Three out of 13 (23%) neonates were small-for-gestational-age. The most common complication was maternal hypertension affecting 8/13 (61.5%) pregnancies. Preeclampsia occurred in one pregnancy. Four out of 13 (30.7%) pregnancies necessitated preterm induction of labor due to obstetric indications or uncontrolled disease. CONCLUSION Although Takayasu's arteritis is associated with pregnancy complications, tight preconception disease control, strict follow up, and targeted treatment of high blood pressure can result in positive pregnancy outcome.

**Author(s):** Itani, Rayan; Elmallahi, Naefa; Ramadan, Mohamed Ahmed Abdelmoneam; Al Ibrahim, Abdullah

**Source:** Cureus; Sep 2018; vol. 10 (no. 9); p. e3370

**Publication Date:** Sep 2018

**Publication Type(s):** Case Reports

**PubMedID:** 30510880

Available at Cureus - from Europe PubMed Central - Open Access
Available at Cureus - from ProQuest (Health Research Premium) - NHS Version
Available at Cureus - from Unpaywall

**Abstract:** Takayasu's arteritis (TA) is a rare and chronic inflammatory disease of the large vessels. It affects women of reproductive age and leads to an increased risk of cardiovascular complications, such as hypertension and congestive heart failure. We are presenting a case of a pregnant woman with TA, who was seen and managed at a tertiary care institute and ultimately enjoyed a favorable outcome. Thus, multidisciplinary care for patients with TA has proven to be crucial in optimized and favorable maternal and fetal/neonatal outcomes.

17. Takayasu arteritis, pregnancy and delivery: Case report

**Author(s):** Nada A.; Uvelin A.; Prijic S.M.

**Source:** Kuwait Medical Journal; Jun 2018; vol. 50 (no. 2); p. 236-238

**Publication Date:** Jun 2018

**Publication Type(s):** Article

**Abstract:** Takayasu arteritis (TA) is a rare chronic inflammatory disease affecting major arterial vessels, the aorta and its branches, as well as peripheral blood vessels. Due to numerous cardiovascular complications, the best management for pregnant patients with TA is controversial and challenging for the anesthesiologist and obstetrician. In this case report, we describe a 24-year-old primigravida diagnosed with TA. The patient was admitted to our hospital at 29 weeks of pregnancy complaining of breathlessness, dyspnea, palpitations and fatigue. Upon physical examination, and following electrocardiogram (EKG), chest X-ray and cardiac ultrasound analyses, the patient was diagnosed with heart failure with preserved left-ventricular ejection fraction (HF-PEF). After a two-week treatment, due to a high risk of cardiac and pulmonary complications, we performed a cesarean section (CS) under general anesthesia (GA). Patient evaluation, determining the optimal time and mode of delivery and anesthetic planning are essential to ensure a successful outcome in pregnant patients with Takayasu arteritis.Copyright © 2018, Kuwait Medical Association. All rights reserved.

**Author(s):** Lumbreras-Marquez, Jesus; Castillo-Reyther, Roberto Arturo; De-la-Maza-Labastida, Salvador; Vazquez-Alaniz, Fernando

**Source:** Journal of medical case reports; Jan 2018; vol. 12 (no. 1); p. 12

**Publication Date:** Jan 2018

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 29338776

Available at [Journal of medical case reports](http://www.biomedcentral.com/1752-1947/12/12) - from BioMed Central

Available at [Journal of medical case reports](http://link.springer.com/article/10.1186/s13256-017-1293-z) - from SpringerLink - Medicine

Available at [Journal of medical case reports](http://www.europepmc.org/openaccess/10.1186/s13256-017-1293-z) - from European PubMed Central - Open Access

Available at [Journal of medical case reports](http://www.proquest.com/开放-access-529099111) - from ProQuest (Health Research Premium) - NHS Version

Available at [Journal of medical case reports](http://unpaywall.org) - from Unpaywall

**Abstract:**

**BACKGROUND** Takayasu arteritis is a rare, chronic, granulomatous systemic vasculitis of unknown etiology and a few cases have been reported in pregnancy. In pregnancies concomitant with Takayasu arteritis or after diagnosis, Takayasu arteritis negatively affects pregnancy by increasing 13-fold the odds of complications such as hypertensive disorders. The best recommendations in this scenario are still to be made.

**CASE PRESENTATION** We present a case of 21-year-old, gravid 1, Mexican woman of Mestizo descent with chronic hypertension diagnosed since she was 15-years old who presented severe hypertension during pregnancy (early second trimester); the diagnosis of hypertensive disorder of pregnancy was ruled out requiring first-line and second-line antihypertensive therapy without serious associated maternal or fetal morbidity.

**CONCLUSION** Takayasu arteritis and pregnancy play an important role in maternal and fetal outcomes. Efforts should be made to further investigate the Takayasu arteritis diagnosis in pregnant women with refractory hypertension.

**Database:** Medline
19. Takayasu's Arteritis in Pregnancy: A Rare Case Report from a Tertiary Care Infirmary in India.

**Author(s):** Marwah, Sheeba; Rajput, Monika; Mohindra, Ritin; Gaikwad, Harsha S; Sharma, Manjula; Topden, Sonam R

**Source:** Case reports in obstetrics and gynecology; 2017; vol. 2017 ; p. 2403451

**Publication Date:** 2017

**Publication Type(s):** Case Reports

**PubMedID:** 28265476

Available at Case reports in obstetrics and gynecology - from Europe PubMed Central - Open Access

Available at Case reports in obstetrics and gynecology - from Unpaywall

**Abstract:** Background. Takayasu's arteritis (TA) is a rare, chronic, inflammatory, progressive, idiopathic arteriopathy, afflicting young women of reproductive age group, causing narrowing, occlusion, and aneurysms of systemic and pulmonary arteries, especially the aorta and its branches. During pregnancy, such patients warrant special attention. An interdisciplinary collaboration of obstetricians, cardiologists, and neurologists is necessary to improve maternal and fetal prognosis. Here a case is reported where a patient with diagnosis of TA, complicated by neurological sequelae, successfully fought the vagaries of the condition twice to deliver uneventfully. Case. 25-year-old G2P1L1 presented at 34 weeks of gestation, with chronic hypertension, with TA, with epilepsy, and with late-onset severe IUGR. Following a multidisciplinary approach, she delivered an alive born low birth weight baby (following induction). Her postpartum course remained uneventful. Conclusion. Pregnancy with TA poses a stringent challenge to an obstetrician. Despite advancements in cardiovascular management and advent of new-fangled drugs, the optimal management for pregnant patients with this disease still remains elusive.

**Database:** Medline

20. Clinical analysis: 13 cases of pregnancy complicated with Takayasu arteritis.

**Author(s):** Zhang, Yingjia; Li, Yanna; Zhang, Jun

**Source:** Ginekologia polska; 2017; vol. 88 (no. 12); p. 654-661

**Publication Date:** 2017

**Publication Type(s):** Journal Article

**PubMedID:** 29303222

Available at Ginekologia polska - from Free Medical Journals . com

Available at Ginekologia polska - from Unpaywall

**Abstract:** OBJECTIVE To investigate the clinical features, disposition, and effect of pregnancy complicated with Takayasu arteritis (P-TA) on maternal and fetal outcomes. MATERIAL AND METHODS The clinical data (diagnosis and treatment, peri-pregnancy monitoring, and pregnancy outcomes) of patients with P-TA treated in our hospital between September 2007 and April 2016 were analyzed retrospectively. RESULTS Among the 13 P-TA cases, seven were diagnosed before pregnancy, and six were diagnosed during pregnancy; six cases were diagnosed as the generalized type, and seven cases were diagnosed as the cephalic-brachial type; six cases were in the stable stage, and seven cases were in the active stage. All the cases in the active stage underwent glucocorticoid therapy. Four cases developed complications, including cardiac dysfunction combined with preeclampsia in two cases, preeclampsia in one case, and stroke in one case. Eleven patients successfully delivered (nine cases of full-term delivery and two cases of premature delivery); one patient had late miscarriage; one patient had missed abortion. All the parturients survived and delivered 11 neonates (nine full-term neonates and two premature neonates) and one low-birth-
weight neonate; no neonatal asphyxia or death occurred.

**CONCLUSION:** Patients with P-TA can have better maternal and child outcomes through timely diagnosis and treatment, dynamic monitoring, or timely pregnancy termination.

**Database:** Medline


**Author(s):** Gudbrandsson, Birgir; Wallenius, Marianne; Garen, Torhild; Henriksen, Tore; Molberg, Øyvind; Palm, Øyvind

**Source:** Arthritis care & research; Sep 2017; vol. 69 (no. 9); p. 1384-1390

**Publication Date:** Sep 2017

**Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article

**PubMedID:** 27813289

Available at Arthritis care & research - from Wiley Online Library Science, Technology and Medicine Collection 2019

Available at Arthritis care & research - from Unpaywall

**Abstract:**

**OBJECTIVE:** To assess pregnancy outcomes in an unselected Takayasu arteritis (TAK) cohort, and identify pregnancy-related concerns.

**METHODS:**

Consenting female patients with TAK were predominantly recruited from a population-based southeast Norway TAK cohort. Additional cases (n = 8) were recruited at Oslo University Hospital. Data on the number of pregnancies, births, and pregnancy outcomes before and after disease onset were retrieved from medical charts, patient questionnaires, and the Medical Birth Registry of Norway (MBRN). Data on pregnancy-related concerns were gathered from patient questionnaires.

**RESULTS:**

Altogether, the 58 women in the TAK study cohort had been through 110 pregnancies, 73 (in 33 patients) before disease onset and 37 (in 23 patients) after onset. The frequencies of miscarriages, induced abortions, and maternal complications did not differ between pregnancies occurring before and after TAK onset. Pregnancy-related hypertension was seen in 4.2% of the patients, compared to 1.5% (P = 0.37) in the reference cohort from MBRN, and preeclampsia/eclampsia in 4.5% compared to 3% (P = 0.2). The mean gestational age at delivery in pregnancies after TAK onset was 37.5 weeks, compared to 39.5 weeks in the MBRN references (P < 0.001). Cesarean sections were more frequent in deliveries after TAK onset (42%) than in MRBN controls (11%) (P < 0.001). Pregnancy-related concerns were recorded in 80% of the TAK cohort, with 60% expressing concerns about passing the disease to offspring.

**CONCLUSION:** In this population-based TAK cohort, the maternal and fetal outcomes were favorable. This study reveals a high prevalence of pregnancy-related concerns in TAK patients.

**Database:** Medline

**Author(s):** Soo-Hoo, Sarah; Seong, Jenny; Porten, Brandon R; Skeik, Nedaa

**Source:** Vascular and endovascular surgery; May 2017; vol. 51 (no. 4); p. 195-198

**Publication Date:** May 2017

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 28424040

**Abstract:** Takayasu arteritis is a rare, chronic vasculitis of unknown etiology characterized by inflammation of the aorta and its main branches. Although Takayasu arteritis mostly affects women of childbearing age, there is a paucity in the literature on pregnancy associated with Takayasu arteritis. Pregnant patients are at increased risk of cardiovascular complications, including hypertension and congestive heart failure, which may jeopardize both maternal and fetal outcomes. Furthermore, optimal management has not yet been established for pregnant patients with Takayasu arteritis, posing a clinical challenge. We present a case of a young woman with Takayasu arteritis whose symptoms and disease activity improved during 2 pregnancies. Although her first pregnancy was complicated with preeclampsia, gestational diabetes, and preterm vaginal delivery, her second pregnancy was uneventful. This case provides a rare glimpse of Takayasu arteritis in pregnancy and highlights the challenges of medical management in gravid patients.

**Database:** Medline

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23. Anesthetic management of Takayasu's arteritis for cesarean section

**Author(s):** Nellore S.S.; Uttarwar A.; Dalvi N.

**Source:** Anaesthesia, Pain and Intensive Care; 2016; vol. 20 (no. 4); p. 474-476

**Publication Date:** 2016

**Publication Type(s):** Article

**Abstract:** Takayasu's arteritis (TA), also called pulseless disease, aortic arch syndrome, occlusive thromboaortopathy, or aortic arteritis, is a chronic vasculitis mainly involving the aorta and/or, its main branches, such as the brachiocephalic, carotid, subclavian, vertebral, renal, coronary and pulmonary arteries. Major challenges for anesthesia in patients with TA involve severe uncontrolled hypertension, end-organ dysfunction, stenosis of major blood vessels, and difficulties in monitoring arterial blood pressure. The cardiovascular complications attributed to the disease can be seriously enhanced during pregnancy. We present successful anesthetic management of emergency cesarean section under general anesthesia in a parturient with long-standing Takayasu's disease with renovascular hypertension complicated by eclampsia.

**Database:** EMBASE
24. Obstetrical management of patients with extra-anatomic vascular bypass grafts due to Takayasu arteritis.

Author(s): Miyasaka, Naoyuki; Egawa, Makiko; Isobe, Mitsuaki; Inoue, Yoshinori; Kubota, Toshiro

Source: The journal of obstetrics and gynaecology research; Dec 2016; vol. 42 (no. 12); p. 1864-1869

Publication Date: Dec 2016

Publication Type(s): Case Reports

PubMedID: 27718287

Available at The journal of obstetrics and gynaecology research from Wiley Online Library

Abstract: Little is known about the obstetrical management of patients with Takayasu arteritis (TA) who have undergone extra-anatomic vascular bypass (EAVB). We describe two cases of EAVB. Case 1 underwent EAVB due to renovascular hypertension associated with stenosis of the abdominal aorta, and Case 2 due to amaurosis fugax episodes associated with stenosis of the brachiocephalic and left common carotid arteries. Pregnancy outcomes were favorable for both cases, though the original symptoms recurred during the third trimester in each case, possibly due to increased blood flow to the pregnant uterus. Neither bypass occlusion nor anastomotic aneurysm formation was observed. Pregnancy outcomes of patients with EAVB due to TA are favorable, although pregnancies of patients with TA who have cardiovascular complications are associated with an increased risk of maternal and fetal morbidity. The obstetrical management of these patients, however, should include monitoring for complications related to the EAVB.

Database: Medline

25. Pulseless Disease in Pregnancy: A Rare Case

Author(s): Narayanamoorthy S.; Ramanan R.

Source: Journal of Obstetrics and Gynecology of India; Oct 2016; vol. 66 (no. 5); p. 391-393

Publication Date: Oct 2016

Publication Type(s): Article

Available at Journal of obstetrics and gynaecology of India from SpringerLink - Medicine

Available at Journal of obstetrics and gynaecology of India from Europe PubMed Central - Open Access

Available at Journal of obstetrics and gynaecology of India from Unpaywall

Database: EMBASE

Author(s): Xiao, Wei; Wang, Tianlong; Fu, Wenyia; Wang, Fengying; Zhao, Lei

Source: Journal of clinical anesthesia; Sep 2016; vol. 33; p. 168-172

Publication Date: Sep 2016

Publication Type(s): Case Reports Journal Article

PubMedID: 27555157

Abstract: The objective of this case report is to present the successful use of regional cerebral oxygen saturation (rScO2) monitoring guided cerebral protection for cesarean delivery in a parturient with Takayasu's arteritis at 38 weeks' gestation. The parturient presented with impaired cerebral and renal perfusion. Titrated epidural anesthesia was performed. During the procedure, we used rScO2 guided cerebral protection strategies, which helped to optimize cerebral oxygen delivery and prevent cerebral complications.

Database: Medline


Author(s): Yang, Hua

Source: Clinical and experimental obstetrics & gynecology; 2015; vol. 42 (no. 2); p. 248-250

Publication Date: 2015

Publication Type(s): Case Reports Journal Article Review

PubMedID: 26054132

Abstract: Takayasu arteritis (TA) is a chronic non-specific inflammatory vascular disease, of which the cause is not very clear. The disease is more severe in females. Furthermore, during the entire pregnancy, it is of great harm to the mother and child. The formation of blood clots is harmful to the mother and thrombosis is dangerous to the fetus and can lead to its death. Hence, prevention with control of perioperative hemodynamic changes during the pregnancy is an effective method to prevent heart failure, embolism, and thrombosis.

Database: Medline


Author(s): Soma-Pillay, P; Adeyemo, A; Suleman, F E

Source: Cardiovascular journal of Africa; 2015; vol. 26 (no. 1); p. e14

Publication Date: 2015

Publication Type(s): Case Reports Journal Article

PubMedID: 25670635

Available at Cardiovascular journal of Africa - from Unpaywall

Abstract: Takayasu arteritis is a chronic, granulomatous arteritis affecting large and medium-sized arteries. During pregnancy, maternal and foetal complications are largely as a consequence of maternal arterial hypertension. We present a case of a 35-year-old para one gravida two patient with Takayasu arteritis (group III disease) complicated by chronic hypertension and a severely dilated ascending aorta. Good blood pressure control during pregnancy is an important measure in reducing obstetric morbidity.

Author(s): Alpay-Kanitez, N; Omma, A; Erer, B; Artim-Esen, B; Gül, A; İnanç, M; Öcal, L; Kamali, S

Source: Clinical and experimental rheumatology; 2015; vol. 33 (no. 2)

Publication Date: 2015

Publication Type(s): Journal Article

PubMedID: 25236472

Abstract: OBJECTIVE Takayasu arteritis is a chronic large-vessel vasculitis in young women of reproductive age. We aimed to obtain information on pregnancy in TA retrospectively. METHOD Takayasu arteritis patients with history of pregnancy were included in this study. The evaluations included physical findings, serum C-reactive protein, erythrocyte sedimentation rate as well as history and symptoms. Information about pregnancies, abortus, deliveries and newborns was obtained from medical records. Disease activity score, disease damage index appraised Kerr's criteria and vasculitis damage index (VDI) and medication were recorded. RESULT Thirty-six Takayasu arteritis patients who had a total of 84 pregnancies were evaluated. The mean age of patients ranged 24.5 ± 6.6 years. Subclavian arteries (86%) were the most frequently involved vessels. We were able to complete the follow-up of ten patients who had a pregnancy after diagnosis during the period of pregnancy. Two patients who had renal artery involvement and active disease in third trimester suffered from preeclampsia and a worsening of hypertension. In one of them, disease flared up in the third trimester. There was no active disease in the postpartum sixth month. Maternal heart failure, cerebrovascular accident, death or cerebral hypoperfusion at the time of delivery, asphyxia and newborn anomalies were not seen in any of these patients. CONCLUSION TA pregnancies may have a favourable outcome with regular follow-up schedule and close monitorisation of blood pressure.

Database: Medline

30. Takayasu's arteritis and pregnancy

Author(s): Malhotra V.; Nanda S.; Chauhan M.; Malhotra P.; Malhotra N.

Source: Journal of SAFOG; 2015; vol. 7 (no. 3); p. 234-235

Publication Date: 2015

Publication Type(s): Article

Available at Journal of South Asian Federation of Obstetrics and Gynaecology - from Unpaywall

Abstract: Introduction: Takayasu's arteritis (TA) is a rare clinical entity characterized by the progressive obliteration of the aortic arch and the main vessels arising from it and, in some cases of the thoracic and abdominal aorta and its main branches. Case: We report a case in which diagnosis of TA was made 6 years ago and present pregnancy was successfully managed. Conclusion(s): Multidisciplinary management is essential for satisfactory clinical outcome during pregnancy and their blood pressure should be strictly controlled for a favorable maternal and fetal outcome and mode of delivery should be planned. Copyright © 2015, Jaypee Brothers Medical Publishers (P) Ltd. All rights reserved.

Database: EMBASE

**Author(s):** Comarmond, C; Mirault, T; Biard, L; Nizard, J; Lambert, M; Wechsler, B; Hachulla, E; Chiche, L; Koskas, F; Gaudric, J; Cluzel, P; Messas, E; Resche-Rigon, M; Piette, J C; Cacoub, P; Saadoun, D; French Takayasu Network

**Source:** Arthritis & rheumatology (Hoboken, N.J.); Dec 2015; vol. 67 (no. 12); p. 3262-3269

**Publication Date:** Dec 2015

**Publication Type(s):** Research Support, Non-u.s. Gov't Multicenter Study Journal Article

**PubMedID:** 26315109

Available at Arthritis & rheumatology (Hoboken, N.J.) - from Wiley Online Library

**Abstract:**

**OBJECTIVE**To assess the relationship between Takayasu arteritis (TAK) and pregnancy outcome.

**METHODS**This study included 240 pregnancies in 96 patients fulfilling the American College of Rheumatology 1990 criteria for the classification of TAK and/or the 1994 Chapel Hill Consensus Conference nomenclature/criteria for vasculitis. We analyzed obstetric and maternal outcomes in women who were pregnant before and/or at the same time as or after TAK diagnosis. We assessed factors associated with complicated pregnancy.

**RESULTS**One hundred forty-two pregnancies occurred in 52 patients before TAK diagnosis (median age at pregnancy 26 years [interquartile range 23-30 years]), and 98 pregnancies occurred in 52 patients concomitant with or after TAK diagnosis (median age at pregnancy 28 years [interquartile range 26-31 years]). Pregnancies concomitant with or after TAK diagnosis had a 13-fold higher rate of obstetric complications compared to pregnancies before TAK diagnosis (odds ratio 13 [95% confidence interval 5-33], \(P = 1\)) (odds ratio 28.7 [95% confidence interval 7.89-104.7]) were independently associated with obstetric and maternal complications.

**CONCLUSION**TAK negatively affects pregnancy outcomes. Disease activity increases the risk of obstetric and maternal complications, mainly due to arterial hypertension.

**Database:** Medline

32. Maternal and fetal outcomes in pregnant women with Takayasu aortoarteritis: Does optimally timed intervention in women with renal artery involvement improve pregnancy outcome?

**Author(s):** Singh, Nilanchali; Tyagi, Shakun; Tripathi, Reva; Mala, Y M

**Source:** Taiwanese journal of obstetrics & gynecology; Oct 2015; vol. 54 (no. 5); p. 597-602

**Publication Date:** Oct 2015

**Publication Type(s):** Journal Article Observational Study

**PubMedID:** 26522118

Available at Taiwanese journal of obstetrics & gynecology - from Free Medical Journals . com

Available at Taiwanese journal of obstetrics & gynecology - from Unpaywall

**Abstract:**

**OBJECTIVE**Takayasu aortoarteritis (TA) is common in the Southeast Asian and Indian subcontinent regions with a female-to-male ratio of 8:1. Age at diagnosis is < 30 years in 90% of the cases. Because the disease is common in women of child-bearing age, management of pregnancy in these patients becomes an important issue. The purpose of this study is to evaluate the maternal and fetal outcomes in pregnancies with TA and also to evaluate whether early intervention for renal artery involvement is associated with improved outcomes.

**MATERIALS AND METHODS**We collected data of 12 patients with 18 pregnancies prospectively from 2006 to 2012. The patients were divided into three groups and their outcomes were noted: (1) without renal artery involvement; (2) with renal artery involvement without intervention; and (3) with renal artery involvement for which intervention has been done.

**RESULTS**Body mass index of patients was between 18.5 kg/m(2) and 23.2 kg/m(2). Renal artery involvement and hypertension were seen in four patients. One patient had percutaneous transluminal balloon angioplasty and another had renal artery stenting. In
patients without renal artery involvement, gestational hypertension was seen in 50%, pre-eclampsia in 10%, abortion in 10%, and intrauterine growth restriction (IUGR) in 40% of pregnancies. In patients with renal artery involvement without intervention, gestational hypertension was seen in 90%, pre-eclampsia in 20%, abortion in 60%, preterm in 20%, IUGR in 20%, fetal demise in 20%, and neonatal death in 20% of pregnancies. In patients with renal artery involvement for which intervention has been carried out, gestational hypertension was seen in 66%, and abortion and IUGR were seen in 33% of pregnancies.

CONCLUSION Patients with renovascular involvement without intervention are at high risk of having maternal and fetal complications. Early intervention prior to conception in these women is recommended to prevent pregnancy complications.

Database: Medline

33. Maternal and Neonatal Outcomes in 89 Patients with Takayasu Arteritis (TA): Comparison Before and After the TA Diagnosis.

Author(s): Assad, Ana Paula Luppino; da Silva, Thiago Ferreira; Bonfa, Eloisa; Pereira, Rosa Maria R

Source: The Journal of rheumatology; Oct 2015; vol. 42 (no. 10); p. 1861-1864

Publication Date: Oct 2015

Publication Type(s): Comparative Study Journal Article

PubMedID: 26329335

Abstract: OBJECTIVE To evaluate maternal and neonatal outcomes in patients before and after a diagnosis of Takayasu arteritis (TA). METHODSPatients diagnosed with TA according to the American College of Rheumatology criteria were selected from the Vasculitis Outpatient Clinic of the Rheumatology Division. Healthy female staff members of this hospital of similar age and educational level were selected as the controls. The disease data were obtained from an ongoing electronic database protocol. A standardized questionnaire, emphasizing gestational history, was applied to both groups. The prevalence of fetomaternal complications and disease variables were evaluated between the groups and a statistical analysis was performed. RESULTSA total of 89 patients with TA (156 pregnancies) and 89 healthy controls (181 pregnancies) were evaluated. There were 75.6% pregnancies that occurred before the TA diagnosis (pre-TA group) and 24.3% after (post-TA group). In the pre-TA group, higher rates of hypertension (HTN; 27.1% vs 3.9%, p 0.05). Further comparison of the pre- and post-TA groups revealed similar rates of HTN, abortion, and low birth weight, and higher rates of Cesarean delivery (p = 0.002), prematurity (p < 0.001), and infection (p = 0.045) in the latter group. CONCLUSION Our study identified that patients with TA, even before the disease diagnosis, have a worse fetal outcome that is most likely associated with high rates of HTN. TA was identified as an additional differential diagnosis for HTN in pregnancy.

Database: Medline

**Author(s):** Sangle, Shirish R; Vounotrypidis, Periklis; Briley, Annette; Nel, Louise; Lutalo, Pamela M K; Sanchez-Fernandez, Simon; Chaib, Ahlem; Salas-Manzanedo, Veronica; Shennan, Andrew; Khamashta, Munther A; D'Cruz, David P

**Source:** Rheumatology (Oxford, England); Sep 2015; vol. 54 (no. 9); p. 1582-1586

**Publication Date:** Sep 2015

**Publication Type(s):** Journal Article

**PubMedID:** 25832613

Abstract: OBJECTIVE To study the outcome of pregnancy in patients with systemic vasculitis (SV) compared with age-, BMI- and ethnicity-matched healthy pregnant controls. METHODS Fifty-one pregnancies in 29 SV patients were retrospectively studied. There were nine patients with granulomatosis with polyangiitis (GPA), three with eosinophilic GPA, seven with Takayasu’s arteritis, two with ANCA-positive vasculitis with renal involvement, two with Behçet’s disease, three with urticarial vasculitis, one with primary cerebral vasculitis, one with relapsing polychondritis and one with IgA vasculitis. BVAS and the vasculitis damage index were evaluated retrospectively. Sixty-two healthy women with 156 pregnancies matched in a 2:1 ratio for age, BMI and ethnicity formed the control group. RESULTS Median gestational age at delivery was lower in the SV group: 36 weeks and 2 days (34-42) vs controls 40 (37-42) weeks (P < 0.03). Median birth weight in the SV group was 3.0 kg (2.0-5.2), whereas that of the controls was 3.5 (2.28-4.32) kg (P = 0.004). The median customized birth weight centile was 38.6 in the SV group and 37.2 in the control group. In the SV group, 9 patients had 13 miscarriages, 3 had pre-eclampsia, and 2 had an intrauterine death. In the control group, 20 patients had 27 miscarriages, 1 had pre-eclamptic toxaemia, and 1 had an antepartum haemorrhage. Eight patients with SV flared during pregnancy and 11 flared after delivery. CONCLUSION Patients with SV had a lower median gestational age, but customized birth weights were similar to those of healthy women. Women with SV may flare during pregnancy and the post-partum period and may experience significant pregnancy morbidity.

**Database:** Medline

35. Heart failure, metabolic acidosis, and postoperative multiple organ failure after anesthesia for cesarean section in a patient with Takayasu arteritis: a case report.

**Author(s):** Chi, Meiying; Qi, Lifeng; Cai, Ailan; Zhang, Yanwei; Li, Fengguang; Jia, Xinquan

**Source:** Clinical and experimental obstetrics & gynecology; 2014; vol. 41 (no. 5); p. 583-586

**Publication Date:** 2014

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 25864266

Abstract: The incidence of Takayasu arteritis (TA) is approximately one in 200,000. The prevalence of this disease is higher among Asian women under the age of 30. Most pregnant women with mild TA receive spinal anesthesia for cesarean sections. Despite difficulties in measuring blood pressure, the entire surgical process, including the administering of anesthesia, is generally stable. Studies in this area are rare. The authors report a case of a pregnant woman with TA who received anesthesia for a cesarean section and then suffered for heart failure, metabolic acidosis, and postoperative multiple organ failure. The authors hope to contribute to the clinical studies on the subject of anesthesia for pregnant women with TA.
**36. Takayasus's arteritis in pregnancy - A rare case report**

**Author(s):** Dash S.; Mahapatro A.K.

**Source:** International Journal of Pharma and Bio Sciences; 2014; vol. 5 (no. 4)

**Publication Date:** 2014

**Publication Type(s):** Article

**Abstract:** Takayasu's arteritis is a chronic inflammatory oblitative arteritis of unknown aetiology. Anaesthesia in these patients is complicated by uncontrolled hypertension, hypoperfusion of organs and difficulty in BP monitoring due to stenosis and aneurismal dilatation of arteries. This case report is about successful management of a 27 yrs old primigragida with known case of Takayasu's arteritis, Seizure disorder and Hypothyroidism at 38 wks of gestation on treatment who underwent an emergency caesarean section under spinal anaesthesia. The intraoperative and postoperative period was uneventful. Uniqueness of this case is maintenance of adequate mean arterial pressure in a hypothyroid patient with TA by adequate preloading and SAB with low dose local anaesthetic with a narcotic (fentanyl).

**Database:** EMBASE

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**37. Analysis of pregnancies in women with Takayasu arteritis: complication of Takayasu arteritis involving obstetric or cardiovascular events.**

**Author(s):** Tanaka, Hiroaki; Tanaka, Kayo; Kamiya, Chizuko; Iwanaga, Naoko; Yoshimatsu, Jun

**Source:** The journal of obstetrics and gynaecology research; Sep 2014; vol. 40 (no. 9); p. 2031-2036

**Publication Date:** Sep 2014

**Publication Type(s):** Journal Article

**PubMedID:** 25181623

Available at [The journal of obstetrics and gynaecology research](http://www.wileyonlinelibrary.com) from Wiley Online Library

**Abstract:** AIMSThe incidence of Takayasu arteritis during child-bearing years is relatively high. The management of pregnancies in patients with this disease is of great importance in clinical obstetrics. Here we analyzed pregnancies of women with Takayasu arteritis with and without complications.MATERIAL AND METHODSWe retrospectively identified 27 pregnancies in 20 women with Takayasu arteritis seen between 1983 and 2005 at the National Cardiovascular Center, in Osaka, Japan. The incidences of obstetric events, steroid dose increase in pregnancy, and cardiovascular events were compared between group I (no complications), group II (one complication), and group III (two or more complications).RESULTSNone of the pregnancies showed Takayasu arteritis activity. The obstetric events were pre-eclampsia in four pregnancies (15%), fetal growth restriction in one (4%), and abruption in one (4%). Three pregnancies involved a steroids dose increase. There were no cardiovascular events. Eighty percent of the pregnancies that included an obstetric event also involved the mother's chronic hypertension.CONCLUSIONSPregnant women without active Takayasu arteritis have a low risk of developing a cardiovascular event. For women with chronic hypertension, it might be important to note the development of pre-eclampsia, fetal growth restriction and abruption.

**Database:** Medline

Author(s): Rujiwetpongstorn, Jittima; Yanase, Yuri

Source: Journal of the Medical Association of Thailand = Chotmaihet thangphaet; Nov 2013; vol. 96 (no. 11); p. 1508-1511

Publication Date: Nov 2013

Publication Type(s): Case Reports Journal Article

PubMedID: 24428102

Abstract: Takayasu arteritis is a rare chronic inflammatory vascular disease involving the aorta and its major branches. During pregnancy, the disease can be life-threatening. This report describes a successful management of twin pregnancy complicated with Takayasu disease, rarely described elsewhere. A 33-year-old pregnant woman had been diagnosed with Takayasu disease since the age of 15 during a typical history and investigation. The patient underwent abdominal aortic aneurysmectomy with graft and revascularization of renal artery with saphenous vein graft before pregnancy. This pregnancy was a monochorion-diamnion twin. She was closely followed up and taken care of by a multidisciplinary approach at the high-risk antenatal clinic. A single fetal demise was detected at 20 weeks and the live fetus was diagnosed with intrauterine growth restriction at 25 weeks. Cesarean delivery was performed at 30 weeks due to severe IUGR, abnormal umbilical artery Doppler, and maternal superimposedpreeclampsia, giving birth to a healthy female baby weighing 960 gm. The case presented here implies that a successful outcome of twin pregnancy complicated with Takayasu disease is possible with multidisciplinary approach and extreme cautions.

Database: Medline


Author(s): Gautam, Shefali; Srivastava, Vinod Kumar; Kumar, Sanjeev; Wahal, Reeta

Source: BMJ case reports; May 2013; vol. 2013

Publication Date: May 2013

Publication Type(s): Case Reports Journal Article

PubMedID: 23709154

Available at BMJ case reports - from Europe PubMed Central - Open Access
Available at BMJ case reports - from HighWire
Available at BMJ case reports - from ProQuest (Health Research Premium) - NHS Version
Available at BMJ case reports - from Unpaywall

Abstract: Takayasu arteritis is a rare, chronic idiopathic, occlusive inflammation of the aorta and its major branches. It is a rare form of non-specific obliterative panarteritis of unknown aetiology. Anaesthesia for the patient with Takayasu arteritis is complicated by severe uncontrolled hypertension leading to end organ dysfunction, stenosis of major blood vessel affecting regional circulation and difficulties in the monitoring of arterial blood pressure. We report a 26-year-old woman multigravida who was diagnosed with Takayasu arteritis who underwent an emergency caesarean section under spinal anaesthesia. In this case study, the whole course of anaesthesia and operation was uneventful due to thorough systemic evaluation and planned anaesthetic management.

Database: Medline
40. Takayasu arteritis complicating pregnancy in adolescence.

**Author(s):** Li, Linda T; Gilani, Ramyar; Tsai, Peter I; Wall, Matthew J

**Source:** Annals of vascular surgery; Aug 2012; vol. 26 (no. 6); p. 858

**Publication Date:** Aug 2012

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 22633271

**Abstract:** Pregnant adolescent patients afflicted with Takayasu arteritis represent a clinical entity not seen by many. The care of such patients is often managed by multidisciplinary teams, where vascular surgeons are asked to provide input on cardiovascular implications during and after a pregnant state. Knowledge and understanding of the interaction between the two conditions allows for well-informed decision making and favorable outcomes with pregnancy, as well as proper long-term follow-up and care with appropriate clinicians.

**Database:** Medline

41. Takayasu arteritis in pregnancy: an analysis from eastern India.

**Author(s):** Mandal, Debasmita; Mandal, Saroj; Dattaray, Chaitali; Banerjee, Dipanwita; Ghosh, Parasar; Ghosh, Alokendu; Panja, Manotosh

**Source:** Archives of gynecology and obstetrics; Mar 2012; vol. 285 (no. 3); p. 567-571

**Publication Date:** Mar 2012

**Publication Type(s):** Journal Article

**PubMedID:** 21786001

**Abstract:** OBJECTIVE Takayasu's Arteritis (TA) is a rare inflammatory disease of medium and large size arteries that affects women of reproductive age. This study aims to highlight the antenatal management and analyze the obstetric outcome in women with TA. METHOD This retrospective study was carried out in the Department of O&G, Cardiology and Rheumatology--IPGME&R, Kolkata from June 2002 to July 2010. Sixteen patients with 29 pregnancy events were compared with 60 matched controls. RESULTSClinical presentation of study population at admission included unequal or absent pulse, hypertension, congestive cardiac failure, retinopathy, aortic regurgitation and cerebrovascular accident (CVA). Mode of delivery was cesarean in 20 pregnancies (71.49%) and vaginal in nine pregnancies (31.03%). Significant maternal complications included pregnancy induced hypertension (100 vs. 1.66%; P < 0.001), preeclampsia (92.85 vs. 0%; P < 0.001), postpartum hemorrhage (17.24 vs. 1.66%; P < 0.001) and preterm labor (17.24 vs. 3.33%; P < 0.001). One maternal mortality was present due to CVA. Neonatal outcome showed 26 live births with increased incidence of intrauterine growth restriction (51.72 vs. 1.66%; P < 0.001) and neonates requiring NICU admissions (58.62 vs. 5.0%; P < 0.001). CONCLUSION Although conception was spontaneous in all these pregnancies, antenatal and intrapartum control of blood pressure played a pivotal role in pregnancy outcome. High rate of operative interference was present. All subsequent pregnancies had similar outcome due to slow progression of the disease. Although pregnancy was complicated by hypertension and its sequelae, successful outcome could be achieved with timely admission, judicious medication and multidisciplinary approach.

**Database:** Medline
OBJECTIVES: Takayasu arteritis predominantly affects young women of reproductive age; therefore, the management of pregnancies with this disease is of great importance in clinical obstetrics. However, only a limited number of such cases have been reported in the English literature. Our aim in this study was to investigate the clinical features of pregnant women with Takayasu arteritis managed at a tertiary center in Japan.

METHODS: We conducted a retrospective study of 26 pregnancies (18 deliveries) in 10 women with Takayasu arteritis, who were managed at Kyushu University Hospital between 1996 and 2010. Data were collected retrospectively by reviewing the maternal medical records.

RESULTS: The mean age of these patients at delivery was 29.3 ± 5.2 years. Six patients had lesions above and below the diaphragm, and four patients showed isolated supradiaphragmatic disease. Echocardiography was performed in all patients, and aortic regurgitation was observed in six. Five pregnancies resulted in spontaneous abortion, and three pregnancies were legally terminated at the patients' request. The remaining 18 pregnancies resulted in live births. Of the 18 live babies born, growth restriction was observed in 2 babies. Superimposed pregnancy-induced hypertension was observed in two cases, and other severe complications, such as cerebral hemorrhage or cardiac failure did not occur.

CONCLUSION: Although Takayasu arteritis is a potentially severe condition during pregnancy, successful pregnancy is possible if extreme caution is followed. Blood pressure should be strictly controlled and the delivery should be planned for favorable maternal and fetal outcomes.

Database: Medline
43. Takayasus’s arteritis in pregnancy. Case report and literature review.

Author(s): Leal, Plínio da Cunha; Silveira, Fernanda Fabrízia Martins; Sadatsune, Eduardo Jun; Clivatti, Jefferson; Yamashita, Américo Masafuni

Source: Revista brasileira de anestesiologia; 2011; vol. 61 (no. 4); p. 479-485

Publication Date: 2011

Publication Type(s): Case Reports Journal Article Review

PubMedID: 21724011

Available at Revista brasileira de anestesiologia - from Unpaywall

Abstract: BACKGROUND AND OBJECTIVES: Takayasu’s Arteritis (TA) is a chronic, inflammatory, progressive, idiopathic disease that causes narrowing, occlusion, and aneurysms of systemic and pulmonary arteries affecting especially the aorta and its branches. During pregnancy, one should pay special attention to these patients. The objective of this report was to present the peripartum anesthetic care of a patient with TA and a review of the literature.

CASE REPORT: This is a 31-year-old gravida who underwent exchange of the aortic arch and placement of a metallic aortic valve for TA four years ago. She had no complications during pregnancy, and she was admitted at 34 weeks of pregnancy for anticoagulation management. Elective cesarean section was performed at 39 weeks with continuous epidural anesthesia. Fractionated doses of local anesthetic were administered to guarantee slow installation of the blockade. The patient remained hemodynamically stable and was transferred to the ICU in the postoperative period.

CONCLUSION: Several complications can affect gravidas with TA. Careful patient evaluation, treatment of TA complications, and anesthetic/surgical planning are fundamental. Maintenance of perfusion is the main concern in these patients, and neuraxial blocks may be used without harming the mother and fetus. In patients with compensated TA complications, monitoring does not differ from that routinely used in cesarean sections. Continuous epidural anesthesia with slow installation maintains hemodynamic stability and allows monitoring cerebral perfusion through the level of consciousness. To avoid postoperative hypoperfusion or hypertensive complications patients should be monitored in an intensive or semi-intensive care unit for 24 hours.

Database: Medline
44. Takayasu's arteritis in pregnancy: review of literature and discussion.
Author(s): Hauenstein, Evelyn; Frank, Helga; Bauer, Jan S; Schneider, K T M; Fischer, Thorsten
Source: Journal of perinatal medicine; 2010; vol. 38 (no. 1); p. 55-62
Publication Date: 2010
Publication Type(s): Case Reports Journal Article Review
PubMedID: 19678743
Abstract: Takayasu's arteritis (TA) is a rare inflammatory disease of the arteries that affects women of childbearing age. The optimal management for pregnant patients with this disease has not yet been defined. The course of disease seems to be neither affected nor worsened by pregnancy. We could not find reported maternal deaths directly related to pregnancy. However, many authors report maternal as well as fetal unfavorable events in the course of pregnancy. We describe a 25-year-old primigravida of Turkish-Greek origin who presented at 30 weeks of pregnancy with active TA. In the 37(th) week, intrauterine fetal death occurred. Our patient did not show high blood pressure or aortic inflammation. The course of her disease was stable. Whether a newly diagnosed TA during pregnancy should be regarded as an indication for premature delivery is discussed. An interdisciplinary collaboration of rheumatologists, nephrologists and obstetricians is necessary to improve maternal and fetal prognosis.
Database: Medline

45. A durable iliac-axillary and axillary-carotid bypass for cerebral ischemia due to Takayasu arteritis allowed successful pregnancies and deliveries.
Author(s): Kondo, Norihiro; Koyama, Masayuki; Iwai, Takehisa; Ozaki, Takashi; Ishiguro, Yoh; Noda, Hiroshi
Source: Journal of vascular surgery; Dec 2010; vol. 52 (no. 6); p. 1713-1715
Publication Date: Dec 2010
Publication Type(s): Case Reports Journal Article
PubMedID: 20619589
Abstract: A 24-year-old Japanese woman underwent ilioaxillary bypass with an expanded polytetrafluoroethylene graft and axillocarotid bypass with an autologous saphenous vein graft for severe brain ischemia due to Takayasu arteritis. A method that involved wrapping strips of the graft around the artery was used to prevent stretching of the anastomotic site. Her general condition and symptoms improved remarkably. She became pregnant three times and delivered the infants without any complications caused by the operation. The present case contributes to proof of patency, effectiveness, and durability of these bypass grafts.
Database: Medline
46. Takayasu's arteritis in pregnancy complicated by peripartum aortic dissection.

**Author(s):** Lakhi, Nisha A; Jones, Johannes  
**Source:** Archives of gynecology and obstetrics; Jul 2010; vol. 282 (no. 1); p. 103-106  
**Publication Date:** Jul 2010  
**Publication Type(s):** Case Reports Journal Article  
**PubMedID:** 20020151  
Available at Archives of gynecology and obstetrics - from SpringerLink - Medicine  
Available at Archives of gynecology and obstetrics - from ProQuest (Health Research Premium) - NHS Version

**Abstract:** INTRODUCTION We describe a patient with a known diagnosis of Takayasu’s arteritis who presented late in the third trimester. She was delivered by caesarean section and her postpartum course was complicated by aortic dissection.  
METHOD This report is the first to describe peripartum aortic dissection in a patient with known Takayasu’s arteritis.  
CONCLUSION Takayasu’s arteritis should be regarded as a risk factor for aortic dissection. It is important to treat systemic hypertension in Takayasu’s arteritis patients and suspect the diagnosis of aortic dissection in any pregnant patient complaining of chest pain as dissection is a leading cause of maternal mortality in the developed world.  
**Database:** Medline

47. Pregnancy and Takayasu arteritis: a single centre experience from North India.

**Author(s):** Suri, Vanita; Aggarwal, Neelam; Keepanasseril, Anish; Chopra, Seema; Vijayvergiya, Rajesh; Jain, Sanjay  
**Source:** The journal of obstetrics and gynaecology research; Jun 2010; vol. 36 (no. 3); p. 519-524  
**Publication Date:** Jun 2010  
**Publication Type(s):** Journal Article  
**PubMedID:** 20598031  
Available at The journal of obstetrics and gynaecology research - from Wiley Online Library

**Abstract:** AIM Takayasu's syndrome is a chronic inflammatory arteriopathy of unknown origin which primarily affects women of reproductive age. We report the course and outcome of 37 pregnancies in 15 women with Takayasu arteritis during the period 1999-2008.  
METHOD A retrospective analysis of 9 years was carried out in a tertiary hospital in Northern India. The effect of disease on the course of pregnancy, complications during pregnancy and perinatal outcome were analyzed.  
RESULTS Hypertension was the most common presenting feature (27%). In the majority of the patients, vessels involved were the subclavian artery and arch of the aorta. Superimposed preeclampsia complicated 62% of pregnancies while 16% of pregnancies had intrauterine growth retardation. Six patients had preterm delivery and one had preeclampsia and placental abruption. The mean gestational age at delivery was 36 +/- 3 weeks. The majority of the patients had a vaginal delivery. There was one maternal death due to accelerated hypertension and its complications.  
CONCLUSION Adequate control of blood pressure during pregnancy, planning the timing and mode of the delivery and vigilant monitoring during intrapartum period with special reference to management of blood pressure and its complications is essential for an optimum outcome.  
**Database:** Medline
48. Low-dose spinal anaesthesia for a parturient with Takayasu's arteritis undergoing emergency caesarean section.

**Author(s):** Dutta, B; Pandey, R; Darlong, V; Garg, R

**Source:** Singapore medical journal; Jun 2010; vol. 51 (no. 6); p. e111

**Publication Date:** Jun 2010

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 20658099

**Abstract:** Takayasu's arteritis is a rare form of nonspecific obliterative panarteritis of unknown aetiology. Anaesthesia for patients with Takayasu's arteritis is complicated by severe uncontrolled hypertension leading to end-organ dysfunction, stenosis of major blood vessels affecting regional circulation, and difficulties in the monitoring of arterial blood pressure. The anaesthetic approach for parturients with Takayasu's arteritis has not been standardised in the literature, and previous reports have documented the use of general as well as regional anaesthesia. There are few instances in the literature where low-dose spinal anaesthesia alone is used in patients with Takayasu's arteritis undergoing emergency caesarean section. We present a case of the successful management of a parturient with Takayasu's arteritis, who underwent an emergency caesarean section under low-dose spinal anaesthesia.

**Database:** Medline


**Author(s):** Bhardwaj, N; Babu, R; Behra, A

**Source:** International journal of obstetric anesthesia; Oct 2009; vol. 18 (no. 4); p. 392-395

**Publication Date:** Oct 2009

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 19665882

**Abstract:** We report the successful anaesthetic management of repair of an abdominal aortic aneurysm in a patient with Takayasu's disease at 14 weeks' gestation. Anaesthesia was managed with combined epidural and general anaesthesia. During the intraoperative period haemodynamic parameters were well maintained. There were no episodes of haemodynamic fluctuations, oxygen desaturation or metabolic acidosis. Aortic cross-clamp time was 105 min, blood loss around 1200 mL, and central venous pressure maintained between 8 and 10 cm H2O. There were no sudden changes in cardiac parameters, base deficit or urine output before or after cross clamping. The patient later delivered a full term, normal fetus.

**Database:** Medline
50. Management of Takayasu arteritis during pregnancy.

Author(s): Shafi, Nabil A; Malik, Amyn; Silverman, David I

Source: Journal of clinical hypertension (Greenwich, Conn.); Jul 2009; vol. 11 (no. 7); p. 383-385

Publication Date: Jul 2009

Publication Type(s): Case Reports Journal Article

PubMedID: 19583635
Available at Journal of clinical hypertension (Greenwich, Conn.) - from Unpaywall

Database: Medline

51. Takayasu arteritis and pregnancy case report and review of the literature

Author(s): Fischer R.L.; Westover T.; Dinh T.; Perry R.; Khandelwal M.; Cardonick E.; Lal N.

Source: Obstetrical and Gynecological Survey; Apr 2009; vol. 64 (no. 4); p. 258-272

Publication Date: Apr 2009

Publication Type(s): Review

Available at Obstetrical & Gynecological Survey - from Ovid (LWW Total Access Collection 2019 - with Neurology)

Abstract: Takayasu arteritis is a rare primary vasculitis of unknown cause, primarily affecting women of child-bearing age. Its course is unpredictable, but slow progression is usual, leading to stenosis, occlusion, or aneurysmal degeneration of the aorta or its major branches. Poor prognostic factors include retinopathy, secondary hypertension, aortic regurgitation and arterial aneurysms. Pharmacological treatment is aimed at controlling vessel inflammation and hypertension. We describe the course and management of pregnancy in a woman with severe, complicated Takayasu’s arteritis and review this disease with special reference to natural history, etiopathogenesis, diagnostic criteria, classification, prognostic factors and treatment strategies. Copyright © 2009 by Lippincott Williams & Wilkins.

Database: EMBASE
52. A successful pregnancy in a patient with Takayasu’s arteritis.

**Author(s):** Kraemer, Bernhard; Abele, Harald; Hahn, Markus; Rajab, Taufiek; Kraemer, Elizabeth; Wallweiner, Diethelm; Becker, Sven

**Source:** Hypertension in pregnancy; 2008; vol. 27 (no. 3); p. 247-252

**Publication Date:** 2008

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 18696353

**Abstract:** Takayasu’s arteritis is a chronic, idiopathic, inflammatory disease of the arteries, which primarily involves the aorta, its main branches such as the brachiocephalic, carotid, subclavian, vertebral, and renal arteries, as well as the coronary and pulmonary arteries. It has been suggested that pregnancy, although not usually associated with an exacerbation of inflammatory vascular lesions, should only be considered during a phase of remission. The increased intravascular volume seen during pregnancy may impair circulation and exacerbate aortic regurgitation, hypertension, and congestive heart failure. Hypertension is probably the most serious major complication that can develop, possibly leading to intrauterine growth retardation, maternal heart failure, and fetal haemorrhage. We describe the case of a patient with a 7-year history of Takayasu’s arteritis who conceived against medical advice. She continued to take her prescribed medication throughout the pregnancy, including adalimumab, leflunomide (until 8 weeks’ gestation), and prednisolone. She underwent a planned cesarean section under spinal anesthesia at 37 + 2 weeks’ gestation, and a healthy baby boy weighing 2550 g was delivered. There were no postpartum complications.

**Database:** Medline

53. General anesthesia for urgent Caesarean section in a patient with untreated Takayasu’s arteritis

**Author(s):** Yavascaoglu B.; Girgin N.K.

**Source:** American Journal of Case Reports; 2008; vol. 9 ; p. 273-276

**Publication Date:** 2008

**Publication Type(s):** Article

**Abstract:** Background: Takayasu's arteritis (TA) is a rare form of nonspesific obliterative panarteritis, and resulting in multiple stenosis and occlusion of major arteries. Progression of the disease may be marked by aneurysmal dilatation of the affected arteries and may lead to fatal outcome, usually from cerebral ischemia or heart failure. In this case report, we describe a successful episode of anesthesia management with monitoring only mean arterial pressure (MAP) in a parturient affected with untreated TA during an urgent Caesarean section (C/S) under general anesthesia (GA). Case Report: A 25-yr-old woman with a history of TA, was scheduled for emergency C/S under GA for acute fetal distress without doing any laboratory tests or special procedures for TA. The MAP was measured as 153 mmHg in the operating room. Because of our technical insufficiency, we could not perform any cerebral monitoring. We started intravenous nitroglycerine infusion, and titrated during the intraoperative period in accordance to the MAP values. Peroperative and postoperative periods were uneventful, and she was discharged 5 days post partum. Conclusion(s): The case presented in this report suggested that, if the blood pressure of a patient with TA before and during the pregnancy is unknown, MAP could be used as a guide in order to protect the brain during general anesthesia, if there is no possibility of monitoring cerebral hemodynamics. © The American Journal of Case Report.

**Database:** EMBASE
54. Peripartum anesthetic management of patients with Takayasu's arteritis: case series and review.

Author(s): Ioscovich, A; Gislason, R; Fadeev, A; Grisaru-Granovsky, S; Halpern, S

Source: International journal of obstetric anesthesia; Oct 2008; vol. 17 (no. 4); p. 358-364

Publication Date: Oct 2008

Publication Type(s): Case Reports Journal Article Review

PubMedID: 18691876

Abstract: Takayasu or pulseless disease is a rare, chronic progressive inflammatory disease that causes thrombosis and occlusion of systemic and pulmonary arteries. Almost 80% of patients are women in their childbearing years. We present three patients with Takayasu's disease who between them had six pregnancies and discuss them in the context of a review of previously published cases. Assessment of the parturient with Takayasu's disease should include an evaluation of the extent of disease, including organ ischemia such as cardiac, renal, cerebral and limb. A multidisciplinary approach should be taken to optimize the parturient's status and formulate a plan for delivery. Peripartum anesthetic management should include optimization of intravascular volume and appropriate monitoring, which may be difficult in the pulseless patient. A regional anesthetic technique may be preferred over general anesthesia to allow monitoring of the cerebral circulation. A slowly titrated regional technique may prevent hemodynamic instability. Patients should be closely monitored postpartum with attention to hypertensive or end organ complications.

Database: Medline


Author(s): Lucena, Alexandre Jorge Gomes de; Carvalho, Antonio Carlos; Souza, Jose Augusto M; Moron, Antonio Fernandes; Sun, Sue Y; Born, Daniel

Source: Arquivos brasileiros de cardiologia; May 2008; vol. 90 (no. 5); p. e33

Publication Date: May 2008

Publication Type(s): Case Reports Journal Article

PubMedID: 18516392

Available at Arquivos brasileiros de cardiologia - from Free Medical Journals . com

Available at Arquivos brasileiros de cardiologia - from Unpaywall

Abstract: We describe here the pregnancy follow-up and outcome in a patient with Takayasu's arteritis, with a detailed account of the complications during gestation and delivery and the impact of the disease on the newborn's health.

Database: Medline
56. Sudden cardiac arrest during cesarean section due to epidural anaesthesia using ropivacaine: a case report.

Author(s): Yoshida, Masashi; Matsuda, Hideo; Fukuda, Isao; Furuya, Kenichi
Source: Archives of gynecology and obstetrics; Jan 2008; vol. 277 (no. 1); p. 91-94
Publication Date: Jan 2008
Publication Type(s): Case Reports Journal Article
PubMedID: 17639437
Available at Archives of gynecology and obstetrics - from SpringerLink - Medicine
Available at Archives of gynecology and obstetrics - from ProQuest (Health Research Premium) - NHS Version
Abstract: Sudden cardiac arrest occurred subsequent to epidural anaesthesia in the patient of elective cesarean section. During cardio-pulmonary resuscitation, immediate section saved the infant and the mother recovered completely. Serial ropivacaine concentrations in maternal serum evaluated potential risk of epidural anaesthesia with ropivacaine. A 39-year-old primipara woman with an 11-year aortitis syndrome (Takayasu disease) was presented. Low dose aspirin of 81 mg per every 3 day and prednisolone of 12 mg per every 2 day maintained her aortitis in good control through pregnancy. An elective cesarean section was planned preventively because of aortitis at 38 weeks of gestation. As an epidural anaesthesia, 20 ml of 1% ropivacaine was injected by one shot from 3/4 lumbar supine through median approach with an appropriate tube testing method in the operation room. At 22 min after injection, a sudden cardiac arrest occurred following to two times of pulseless VT (Ventricular tachycardia) and systemic convulsion occurred. Immediate defibrillation of 200 J was performed promptly, and cesarean section delivered a healthy boy of 2,655 g with APGAR scores of 10 points at 1 and 5 min, respectively. Both mother and neonate were discharged from hospital at 11th day without sequare. Ropivacaine was proved to be a cardio-toxic agent in the case. However, immediate resuscitation and operative delivery served good prognosis for mother and neonate.
Database: Medline


Author(s): Papantoniou, Nikolaos; Katsoulis, Ioannis; Papageorgiou, Ioannis; Antsaklis, Aris
Source: Fetal diagnosis and therapy; 2007; vol. 22 (no. 6); p. 449-451
Publication Date: 2007
Publication Type(s): Case Reports Journal Article
PubMedID: 17652935
Available at Fetal diagnosis and therapy - from ProQuest (Health Research Premium) - NHS Version
Abstract: Takayasu arteritis is a nonspecific chronic inflammatory vascular disease of unknown etiology with a higher incidence during the child-bearing years. It usually involves the branches of the aortic arch. Most of the patients enter the pregnancy being already diagnosed as having the disease and being on medication. The state of the disease in early pregnancy is a definitive factor for determining its management. Although it seems that pregnancy is a state favorable to this disease, nevertheless, complications should be anticipated, and close multidisciplinary maternal and fetal surveillance is mandatory. Early-onset hypertension is the commonest complication, and its magnitude during the late gestational period is the second definitive factor for the management of these pregnancies. A vaginal delivery should be aimed at term with continuous electronic fetal monitoring. The immediate postpartum period is usually uncomplicated despite the circulatory alterations that take place.
58. Anaesthetic management of a patient with Takayasu's arteritis for caesarean section

Author(s): Dave N.M.; Dudhedia U.I.; Chaulkar S.R.; Kamtikar S.

Source: Journal of Anaesthesiology Clinical Pharmacology; Jul 2007; vol. 23 (no. 3); p. 303-306

Publication Date: Jul 2007

Publication Type(s): Article

Abstract: Takayasu's arteritis is a rare, chronic progressive panendarteritis involving the aorta and its main branches. Anaesthetic implications include severe hypertension and the end organ dysfunction resulting from it. The cardiovascular complications attributed to the disease can be seriously enhanced during pregnancy and delivery. We present the successful anaesthetic management of caesarean section in a patient with Takayasu's disease.

Database: EMBASE

59. Pregnancy and Takayasu's arteritis of the pulmonary artery.

Author(s): Jacquemyn, Y; Vercauteren, M

Source: Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology; Jan 2005; vol. 25 (no. 1); p. 63-65

Publication Date: Jan 2005

Publication Type(s): Case Reports Journal Article

PubMedID: 16147700

Database: Medline

60. Successful pregnancy in a patient with Takayasus arteritis.

Author(s): Al-Ghamdi, Aisha A

Source: Saudi medical journal; Nov 2003; vol. 24 (no. 11); p. 1250-1253

Publication Date: Nov 2003

Publication Type(s): Case Reports Journal Article

PubMedID: 14647564

Abstract: This report describes a case of Takayasus arteritis in a 19-year-old Palestinian female. She conceived after diagnosis. Her pregnancy was complicated by uncontrolled hypertension, which was not associated with other markers of disease activity. Despite aggressive medical treatment, caesarean section had to be carried out at 34 weeks of pregnancy because of uncontrolled hypertension. A live fetus was borne, and her blood pressure was subsequently controlled with a single antihypertensive agent.

Database: Medline

Author(s): Latthe, P M; Kilby, M; Jobanputra, P; Alner, M

Source: Journal of obstetrics and gynaecology: the journal of the Institute of Obstetrics and Gynaecology; Mar 2002; vol. 22 (no. 2); p. 228-229

Publication Date: Mar 2002
Publication Type(s): Case Reports Journal Article
PubMedID: 12528717
Database: Medline


Author(s): Sharma, B K; Jain, S; Vasishta, K

Source: International journal of cardiology; Aug 2000; vol. 75

Publication Date: Aug 2000
Publication Type(s): Journal Article
PubMedID: 10980356

Abstract: Of 124 patients with Takayasu arteritis studied over a period of 20 years (1979-1999), 12 female patients experienced 24 pregnancies. The mean age was 23.6 +/- 3.6 years. The presenting features during pregnancy were severe hypertension (11 patients), congestive heart failure (two patients) and unequal pulses (one patient). Aortography revealed that abdominal aorta was involved in 11 patients and renal arteries in nine patients. Of 17 live babies born, intrauterine growth retardation was present in five babies and premature deliveries were encountered in four patients. Pregnancies resulted in abortion in two patients and intrauterine death in five patients. Maternal complications included superimposed pre-eclampsia in four patients, congestive heart failure and progression of renal insufficiency in two patients each and post partum sepsis in one patient. All patients with poor perinatal outcome had abdominal aortic involvement and a significant delay in seeking medical attention.

Database: Medline

63. Association of Takayasu's disease and autoimmune gestational diabetes mellitus.

Author(s): Mauricio, D; Corcoc, R; Morales, J; Vidallar, A; Adelantado, J M; García-Patterson, A; de la Calle, O; de Leiva, A

Source: Endocrine journal; Apr 2000; vol. 47 (no. 2); p. 203-204

Publication Date: Apr 2000
Publication Type(s): Letter Case Reports
PubMedID: 10943746

Available at Endocrine journal - from Unpaywall
Database: Medline
64. Epidural anaesthesia for caesarean section in a patient with severe Takayasu's disease.

**Author(s):** Henderson, K; Fludder, P

**Source:** British journal of anaesthesia; Dec 1999; vol. 83 (no. 6); p. 956-959

**Publication Date:** Dec 1999

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 10700801

Available at [British journal of anaesthesia](https://www.bja.com) - from Unpaywall

**Abstract:** Takayasu's arteritis or disease is a rare, idiopathic, chronic inflammatory disease which causes narrowing, occlusion or aneurysms of blood vessels. It preferentially affects large arteries such as the aorta and its branches and hence its alternative names of pulseless disease, occlusive thromboaortopathy or aortic arch syndrome. Although most commonly found in oriental women, it occurs sporadically throughout the world. We present the case of an elderly primigravida with long-standing Takayasu's disease complicated by hospital and needle phobia who underwent a successful Caesarean section under epidural anaesthesia. Her management is discussed in the light of current opinion regarding pregnancy and Takayasu's disease.

**Database:** Medline

65. Takayasu's arteritis and antiphospholipid antibody syndrome in pregnancy.

**Author(s):** Jean-jaquet, R S

**Source:** Philippine journal of obstetrics & gynecology : official publication, Philippine Obstetrical and Gynecological Society; 1998; vol. 22 (no. 3); p. 99-106

**Publication Date:** 1998

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 12179674

**Abstract:** This paper reports the first documented case of Takayasu's arteritis and antiphospholipid antibody syndrome complicating a pregnancy in a 29-year-old gravida-4 para-3 (1200) woman with recurrent fetal losses. The epidemiology, pathophysiology, effects of both diseases on pregnancy, diagnosis and management are discussed. There is a significant relationship between recurrent fetal losses and circulating antiphospholipid antibodies; however, there is no such relationship between these recurrent fetal losses and Takayasu's arteritis.

**Database:** Medline

Author(s): Clark, A G; al-Qatari, M

Source: Canadian journal of anaesthesia = Journal canadien d'anesthesie; Apr 1998; vol. 45 (no. 4); p. 377-379

Publication Date: Apr 1998

Publication Type(s): Case Reports Journal Article

PubMedID: 9597216

Available at Canadian journal of anaesthesia = Journal canadien d'anesthesie - from SpringerLink - Medicine

Available at Canadian journal of anaesthesia = Journal canadien d'anesthesie - from Free Medical Journals . com

Available at Canadian journal of anaesthesia = Journal canadien d'anesthesie - from ProQuest (Health Research Premium) - NHS Version

Available at Canadian journal of anaesthesia = Journal canadien d'anesthesie - from Unpaywall

Abstract: PURPOSE We present a case of Takayasu's Disease (Oclusive Thromboaortopathy-OTAP) in which general anaesthesia was used for Caesarean section with processed encephalographic monitoring to detect cerebral ischaemia. CLINICAL FEATURES The patient was a 33-year-old woman in whom OTAP had been the cause of cerebrovascular events. She had the typical pulseless upper body of OTAP and had documented severe bilateral carotid artery stenoses. Regional anaesthesia had failed in the past and she demanded general anaesthesia for Caesarean section. Processed electroencephalography was used to assist in monitoring for signs of cerebral ischaemia and the surgery was uncomplicated. CONCLUSION The use of processed electroencephalographic monitoring allows some assessment of cerebral haemodynamics during general anaesthesia in patients who refuse regional techniques.

Database: Medline

67. Three successive pregnancies in a patient with Takayasu's arteritis.

Author(s): Mahmood, T; Dewart, P J; Ralston, A J; Elstein, M

Source: Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology; Jan 1997; vol. 17 (no. 1); p. 52-54

Publication Date: Jan 1997

Publication Type(s): Journal Article

PubMedID: 15511767

Abstract: Takayasu's arteritis is a rare non-specific obliterative panarteritis of unknown origin that occurs predominantly in young Asian and Oriental females of childbearing age and has been encountered in the UK. With the exception of a few large series from the Far East, much of the information on Takayasu's arteritis in pregnancy comes from isolated case reports with no long term follow-up after pregnancy. We report a patient with this condition who had three pregnancies during a 4-year follow-up period with no serious complications.

Database: Medline
68. Takayasu's disease and pregnancy. Three case studies and a review of the literature.

Author(s): Bassa, A; Desai, D K; Moodley, J

Source: South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde; Feb 1995; vol. 85 (no. 2); p. 107-112

Publication Date: Feb 1995

Publication Type(s): Case Reports Journal Article Review

PubMedID: 7597518

Abstract: Takayasu's disease is commonest in women of childbearing age. Obstetricians are therefore faced with the dilemma of optimal management in pregnancy. This report of 3 cases suggests that Takayasu's disease is associated with a good maternal and fetal outcome. The basic disease appears to be unaffected by pregnancy.

Database: Medline


Author(s): Rocha, M P; Gunupalli, K K; Moise, K J; Lockett, L D; Khawli, F; Rokey, R

Source: Chest; Nov 1994; vol. 106 (no. 5); p. 1619-1622

Publication Date: Nov 1994

Publication Type(s): Case Reports Journal Article Review

PubMedID: 7956437

Available at Chest - from Free Medical Journals . com

Abstract: Takayasu's arteritis is an uncommon condition affecting predominantly young women. Because the disorder affects women in childbearing age, it may be recognized the first time during pregnancy. Various cardiovascular events may occur in the perinatal period. We describe a patient with Takayasu's arteritis who presented with massive hemoptysis. To our knowledge, this manifestation has not been documented previously.

Database: Medline

70. Spinal anaesthesia in a patient with Takayasu's disease.

Author(s): Hampl, K F; Schneider, M C; Skarvan, K; Bitzer, J; Graber, J

Source: British journal of anaesthesia; Jan 1994; vol. 72 (no. 1); p. 129-132

Publication Date: Jan 1994

Publication Type(s): Case Reports Journal Article

PubMedID: 7906534

Available at British journal of anaesthesia - from Unpaywall

Abstract: We report the successful anaesthetic management of therapeutic abortion under spinal anaesthesia in a 32-yr-old woman with Takayasu's disease. The pathology and pathophysiology of this syndrome and their impact on anaesthesia are discussed.

Database: Medline
71. Pregnancy with renovascular hypertension due to Takayasu's arteritis - A case report

**Author(s):** Hou J.-Y.; Tsai M.-H.; Chou Y.-S.; Tsai C.-H.; Chen R.

**Source:** Acta Cardiologica Sinica; 1993; vol. 9 (no. 2); p. 122-127

**Publication Date:** 1993

**Publication Type(s):** Article

**Database:** EMBASE

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72. Takayasu's arteritis: low corticosteroid dosage and pregnancy--a case report.

**Author(s):** Del Corso, L; De Marco, S; Vannini, A; Pentimone, F

**Source:** Angiology; Oct 1993; vol. 44 (no. 10); p. 827-831

**Publication Date:** Oct 1993

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 8105731

**Abstract:** The authors describe a case of Takayasu's arteritis in a twenty-five-year-old Italian woman, characterized by nonspecific symptoms (weakness, arthralgias, fever) and elevated erythrocyte sedimentation rate early onset of these symptoms at the age of about twenty-three years early diagnosis, only eighteen months after the onset of symptomatology absence of progression of the disease under corticosteroid therapy with a follow-up of three years uneventful pregnancy ending in cesarean section and birth of a baby without maternal and neonatal complications.

**Database:** Medline

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73. Successful epidural anaesthesia for a patient with Takayasu's arteritis presenting for caesarean section.

**Author(s):** Beilin, Y; Bernstein, H

**Source:** Canadian journal of anaesthesia = Journal canadien d'anesthesie; Jan 1993; vol. 40 (no. 1); p. 64-66

**Publication Date:** Jan 1993

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 8093861

**Available at** Canadian journal of anaesthesia = Journal canadien d'anesthesie - from SpringerLink - Medicine

**Abstract:** The management of a 24-yr-old parturient with Takayasu's arteritis (TA) presenting at term for Caesarean section is discussed. The best anaesthetic management for the patient with TA is controversial, but avoiding regional anaesthesia has been suggested by some authors because of the risk of hypotension and the subsequent need for vasopressors. We report the use of regional anaesthesia in a term parturient with severe TA undergoing Caesarean section. Anaesthesia was provided with chloroprocaine 3%, via a lumbar epidural catheter. The initial doses of 60 mg and 150 mg were followed by a decrease in BP (from 110/70 to 70/40) which was corrected with iv fluids and ephedrine 25 mg. Additional doses of chloroprocaine, 150 and 90 mg, were uneventful. It is concluded that an epidural can be made in safety to provide anaesthesia for Caesarean section in patients with TA.

**Database:** Medline
74. Clinical gynecologic features of pregnancy in Takayasu arteritis.

Author(s): Aso, T; Abe, S; Yaguchi, T

Source: Heart and vessels. Supplement; 1992; vol. 7 ; p. 125-132

Publication Date: 1992

Publication Type(s): Journal Article

PubMedID: 1360958

Abstract: Takayasu arteritis is a non-specific chronic inflammatory vascular disease of unknown etiology. Since the incidence of this disease in the child-bearing years is relatively high, the management of pregnancies with this disease is of great importance in clinical obstetrics. This study is aimed at discussing the maternal management and obstetrical outcome, based on the clinical data obtained from 23 pregnancies of 15 patients treated in our hospital in the past 12 years. Since the disease was in the active state, artificial abortions were conducted in four cases in the 1st trimester of pregnancy. Among the remaining 16 cases, 3, who exhibited neither hypertension nor other complications, vaginally delivered neonates weighing 2,660-3,100 g with Apgar scores of nine after 37 weeks' gestation. C-sections were performed for 13 patients who showed sustained hypertension or/and developed other vascular disorders. Their gestational periods ranged from 34 to 40 weeks and the body weight of the infants varied from 1,425 to 3,024 g. No adverse influence of pregnancy and delivery on Takayasu arteritis was detected in the puerperium of any patients. It is suggested that the state of Takayasu arteritis in early pregnancy and the magnitude of blood pressure elevation in the late gestational period are the most critical and definitive factors in determining the management of pregnancy of a patient with Takayasu arteritis. Cooperative managements by the specialists in obstetrics, internal medicine, and perinatology are required to provide a satisfactory clinical outcome.

Database: Medline

75. Pregnancy in Takayasu arteritis from the view of internal medicine.

Author(s): Matsumura, A; Moriwaki, R; Numano, F

Source: Heart and vessels. Supplement; 1992; vol. 7 ; p. 120-124

Publication Date: 1992

Publication Type(s): Journal Article

PubMedID: 1360957

Abstract: To evaluate the influence of pregnancy on the morbid condition of Takayasu arteritis, we summarized the clinical data and pregnant courses of 18 patients with Takayasu arteritis and a total of 22 deliveries. We followed C-reactive protein (CRP) scores in 16 of 18 patients (20 of 22 deliveries) to ascertain the inflammatory condition inherent in Takayasu arteritis 1 year prior to, during, and 1 year after pregnancy. We also evaluated digital plethysmograms (pulse amplitude, pulse wave, crest time) to follow the hemodynamical condition of patients before, during, and after pregnancy. CRP scores improved significantly during pregnancy and 1 year after delivery. In the digital plethysmograms, pulse amplitude and wave also exhibited improvement after delivery, but crest time remained unchanged. This indicated that pregnancy is a state favorable to this disease. Some factors, such as the sex hormone progesterone, may induce this condition, but the details are still unknown. In conclusion, inflammatory activity and the hemodynamic state improve with pregnancy in patients with Takayasu arteritis. The physiologic aspects which cause this improvement should be maintained even after pregnancy.

Database: Medline
76. Takayasu’s arteritis in a pregnant woman. A case report.

Author(s): Guidozzi, F; Louridas, G; Grant, M G; Koller, A B; King, P; Naylor, S

Source: South African journal of surgery. Suid-Afrikaanse tydskrif vir chirurgie; Dec 1991; vol. 29 (no. 4); p. 159-160

Publication Date: Dec 1991

Abstract: Takayasu’s arteritis in a pregnant white patient is described. This case highlights the fact that, irrespective of race, any patient who presents for the first time in pregnancy with pulseless hypertensive disease or other features suggestive of Takayasu’s arteritis, should have their management in labour determined by the number of complications that are present. These are retinopathy, arterial aneurysms, hypertension and aortic regurgitation. These prognostic criteria will result in a classification of patients that will lead to appropriate management.

Database: Medline

77. Meningioma and Takayasu disease: case report.

Author(s): Canavero, S; Pagni, C A

Source: Italian journal of neurological sciences; Aug 1990; vol. 11 (no. 4); p. 393-394

Publication Date: Aug 1990

Abstract: Meningioma and Takayasu disease: case report.

Database: Medline

78. Severe Takayasu’s arteritis in pregnancy: the role of central hemodynamic monitoring.

Author(s): Winn, H N; Setaro, J F; Mazor, M; Reece, E A; Black, H R; Hobbins, J C

Source: American journal of obstetrics and gynecology; Nov 1988; vol. 159 (no. 5); p. 1135-1136

Publication Date: Nov 1988

Abstract: Maternal cardiovascular complications have been attributed to the dramatic hemodynamic changes associated with labor and delivery in patients with Takayasu's arteritis. The role of central hemodynamic monitoring in the management of a pregnant patient with severe Takayasu's arteritis is discussed.

Database: Medline
79. Takayasu’s arteritis in pregnancy. A report of 4 cases.

**Author(s):** Railton, A; Allen, D G

**Source:** South African medical journal = Suid-Afrikaanse tydskrif vir geneeskunde; Jan 1988; vol. 73 (no. 2); p. 123

**Publication Date:** Jan 1988

**Publication Type(s):** Case Reports Journal Article

**PubMedID:** 2893457

**Abstract:** Four cases of Takayasu’s arteritis in association with pregnancy are described. These patients are at high risk of pregnancy hypertension. Measurement of the blood pressure in the arms may be impossible or unreliable and is often more accurately obtained in the legs.

**Database:** Medline

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80. Doppler ultrasound features of stenosis of the aorta in a pregnancy complicated by Takayasu’s arteritis. Case report

**Author(s):** Giles W.B.; Young A.A.; Howlin K.J.

**Source:** British Journal of Obstetrics and Gynaecology; 1987; vol. 94 (no. 9); p. 907-909

**Publication Date:** 1987

**Publication Type(s):** Article

**PubMedID:** 2889462

**Abstract:** Takayasu’s syndrome is due to an arteritis of unknown aetiology occurring in the thoracic or abdominal aorta in young women. In our patient we found abnormal uteroplacental artery Doppler ultrasound flow velocity waveforms which we believe to be diagnostic. The continuous wave Doppler ultrasound system described by Trudinger et al. (1985) was used to study the fetal umbilical placental circulation and the uteroplacental circulation. The fetal umbilical artery velocity waveforms were within normal limits, but maternal uteroplacental velocity arterial waveforms were strikingly different from those of a normal pregnancy. Although the continuing diastolic flow was very similar to that in normal pregnancy demonstrating low flow resistance, there was a delay in the upstroke of the velocity waveform in systole. The altered slope in systole is believed to be due to damping of the arterial pulsation as a result of the narrowing or stenosis of the aorta. A similar disturbance of the flow velocity waveform was observed when the femoral artery was studied. This method of studying the uteroplacental circulation and femoral artery could be expected to show similar changes in aortic coarctation enabling the diagnosis of this condition to be made during pregnancy.

**Database:** EMBASE
81. Successful outcome of pregnancy in a subfertile patient with severe aortoarteritis (Takayasu's disease).

Author(s): Chua, S; Viegas, O A; Tan, A T; Ratnam, S S

Source: European journal of obstetrics, gynecology, and reproductive biology; Jul 1987; vol. 25 (no. 3); p. 249-253

Publication Date: Jul 1987

Publication Type(s): Case Reports Journal Article

PubMedID: 2886374

Abstract: This report describes the successful outcome of pregnancy in a 27-yr-old subfertile Chinese nullipara with severe Takayasu's disease. Pregnancy was achieved following ovulation induction with clomiphene. Blood pressure was controlled with propranalol and fetal growth was monitored by serial ultrasound fetal anthropometry. Pregnancy was terminated at 38 weeks of pregnancy by elective caesarean section. A live female infant weighing 2420 g was delivered.

Database: Medline

82. Takayasu's arteritis and pregnancy: a case of deleterious association.

Author(s): Graça, L M; Cardoso, M C; Machado, F S

Source: European journal of obstetrics, gynecology, and reproductive biology; Apr 1987; vol. 24 (no. 4); p. 347-351

Publication Date: Apr 1987

Publication Type(s): Case Reports Journal Article

PubMedID: 2884133

Abstract: The association of pregnancy with Takayasu's arteritis is almost always uneventful. A case with high values of maternal blood pressure (BP) and severe intra-uterine growth retardation (IUGR), submitted to aggressive management with the delivery of a live fetus at 30 weeks, is presented.

Database: Medline

83. Pregnancy and Takayasu's arteritis.

Author(s): Wong, V C; Wang, R Y; Tse, T F

Source: The American journal of medicine; Oct 1983; vol. 75 (no. 4); p. 597-601

Publication Date: Oct 1983

Publication Type(s): Journal Article

PubMedID: 6137952

Abstract: Thirteen patients with Takayasu's arteritis had 30 pregnancies between 1970 and 1982. The 11 pregnancies occurring before the disease became clinically evident were uneventful. Eleven patients had 19 pregnancies after manifestation of the disease. Four ended in abortion, four in cesarean section, and 11 in uneventful vaginal delivery at term. There was no major obstetric problem apart from hypertension, and there was no maternal death directly related to the pregnancy per se. All 15 babies were born without asphyxia and congenital abnormality. The nine with some evidence of intrauterine growth retardation could be predicted by a prognostic score taking into account the timing of therapy, the severity of the hypertension, and the extent of arterial involvement.

Database: Medline
84. Takayasu's arteritis in pregnancy: a case presentation demonstrating the absence of placental pathology.

Author(s): Nagey, D A; Fortier, K J; Hayes, B A; Linder, J
Source: American journal of obstetrics and gynecology; Oct 1983; vol. 147 (no. 4); p. 463-465
Publication Date: Oct 1983
Publication Type(s): Case Reports Journal Article
PubMedID: 6137955
Database: Medline

85. Takayasu's or pulseless disease in pregnancy.

Author(s): de Jonge, H J; Knipscheer, R J; Weigel, H M
Source: European journal of obstetrics, gynecology, and reproductive biology; Jan 1983; vol. 14 (no. 4); p. 241-249
Publication Date: Jan 1983
Publication Type(s): Case Reports Journal Article Review
PubMedID: 6131846
Abstract:A case of Takayasu's disease in pregnancy in a 27-yr-old Dutch Gravida I, para 0 is presented, in which the diagnosis was confirmed by angiography before pregnancy. Diagnostic and therapeutic problems occurred during pregnancy; however, a successful delivery of a healthy infant was accomplished. The obstetrical course of this patient is compared with 12 others so far described in the literature. The symptoms of this rare condition may improve or worsen during pregnancy. The best therapy is rest. Vaginal delivery is recommended and cesarean section should be reserved for specific obstetric indications.
Database: Medline

86. Occlusive thromboaortopathy (Takayasu's disease) and pregnancy. Clinical course and management of 33 pregnancies and deliveries.

Author(s): Ishikawa, K; Matsuura, S
Source: The American journal of cardiology; Dec 1982; vol. 50 (no. 6); p. 1293-1300
Publication Date: Dec 1982
Publication Type(s): Journal Article
PubMedID: 6128919
Abstract:Twenty-seven Japanese patients with occlusive thromboaortopathy (Takayasu's disease) associated with 33 pregnancies and deliveries were followed up prospectively, from the prepregnant period. Inflammatory activity of the disease was apparently not enhanced by the pregnancy, but various cardiovascular-related events occurred in the perinatal period. During the intrapartum uterine contractions, marked elevation of systolic blood pressure was associated with 10 pregnancies, including 1 case of subsequent cerebral hemorrhage; this did not occur in 13 normal control gravidas. There were no maternal or neonatal deaths. The birth weight of 25 infants of 21 patients without complications or with a mild single complication of Takayasu's disease was 3,023 +/- 442 g (mean +/- standard deviation). The birth weight of 8 infants of 6 patients who had a severe single complication or multiple complications of the disease was 2,599 +/- 394 g (p less than 0.05).
Of 83 pregnancies, the present 33 plus 50 other reported cases there were no un-toward events in two fifths. Three fifths had various problems, most of which were related to pressure elevation and heart failure, including intrapartum cerebral hemorrhage in 4. These data should assist in predicting the outcome of pregnancy and delivery in patients with Takayasu's disease.

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