



DISCLAIMER: Results of database and or Internet searches are subject to the limitations of both the database(s) searched, and by your search request. It is the responsibility of the requestor to determine the accuracy, validity and interpretation of the results.

Date: 21 June 2019

Sources Searched: Medline, PubMed, Embase.

Clonidogrel in Pregnancy

[See full search strategy](#)

1. Successful gestation and delivery using clonidogrel for secondary stroke prophylaxis: a case report and literature review.

Author(s): Reilly, Christopher R; Cuesta-Fernandez, Ana; Kayaleh, Omar R

Source: Archives of gynecology and obstetrics; Sep 2014; vol. 290 (no. 3); p. 591-594

Publication Date: Sep 2014

Publication Type(s): Case Reports Journal Article Review

PubMedID: 24798936

Available at [Archives of gynecology and obstetrics](#) - from SpringerLink - Medicine

Abstract: Literature is scarce regarding the use of clonidogrel during pregnancy and the potential hazard to maternal and fetal health. We report a 33-year-old female, who presented to our clinic at 40 weeks gestation with a history of multiple prior ischemic strokes and transient ischemic attacks. The patient was placed on clonidogrel for secondary stroke prophylaxis prior to conception and maintained therapy throughout pregnancy without interruption or complication. Clonidogrel was discontinued 7 days prior to induction of labor, and a healthy baby was vaginally delivered without bleeding complications or congenital anomalies. Clonidogrel was restarted 12 hours postpartum without an incident. To our knowledge, this is the first report of clonidogrel use in pregnancy for secondary stroke prophylaxis. We also provide a current review of the literature of the use of clonidogrel in pregnancy. Based on the limited data available, clonidogrel use in pregnancy has not demonstrated significant toxicity to either the mother or the newborn. However, additional studies are needed to further assess the efficacy and safety of this medication in this patient population.

Database: Medline

2. Clopidogrel treatment during pregnancy: a case report and a review of literature.

Author(s): De Santis, Marco; De Luca, Carmen; Mappa, Ilenia; Cesari, Elena; Mazza, Andrea; Quattrocchi, Tomasella; Caruso, Alessandro

Source: Internal medicine (Tokyo, Japan); 2011; vol. 50 (no. 16); p. 1769-1773

Publication Date: 2011

Publication Type(s): Case Reports Journal Article Review

PubMedID: 21841343

Available at [Internal medicine \(Tokyo, Japan\)](#) - from Unpaywall

Abstract: Management of ischemic heart disease in pregnant women is still difficult, as there is little experience with many of the newer treatments such as clopidogrel. The safety of clopidogrel in pregnancy is unknown, especially in combination with aspirin. Its use during gestation has been described in a few case reports. We describe the case of a 36-year-old woman in her 9th week of pregnancy with a history of chronic hypertension, dyslipidemia and CAD, who required antiplatelet treatment. Clopidogrel and aspirin were administered until one week before delivery and a healthy child was born at 36 weeks of pregnancy by caesarean section, without any complication.

Database: Medline

3. Clopidogrel use throughout pregnancy in a patient with a drug-eluting coronary stent.

Author(s): Myers, G Robert; Hoffman, Matthew K; Marshall, Erik S

Source: Obstetrics and gynecology; Aug 2011; vol. 118 (no. 2); p. 432-433

Publication Date: Aug 2011

Publication Type(s): Case Reports Journal Article

PubMedID: 21768844

Available at [Obstetrics and gynecology](#) - from Ovid (Journals @ Ovid) - Remote Access

Abstract: **BACKGROUND** Little information regarding the potential implications of drug-eluting stents and clopidogrel on pregnancy exists. **CASE** We report a case of a 27-year-old woman who received a drug-eluting coronary stent for an acute myocardial infarction and was started on clopidogrel as treatment. She was on clopidogrel when she conceived and delivered a child by cesarean. Her postpartum course was complicated by postoperative bleeding requiring transfusion. **CONCLUSION** This case highlights the perinatal and peripartum concerns of these interventions in women of childbearing age. It suggests that cesarean delivery is associated with an elevated risk of perioperative bleeding and may best be approached like other surgical procedures, with the optimal timing of surgery, when feasible, being 5 or more days after the discontinuation of clopidogrel.

Database: Medline

4. Treatment of acute myocardial infarction in pregnancy with coronary artery balloon angioplasty and stenting: use of tirofiban and clopidogrel.

Author(s): Boztosun, Bilal; Olcay, Ayhan; Avci, Anil; Kirma, Cevat

Source: International journal of cardiology; Jul 2008; vol. 127 (no. 3); p. 413-416

Publication Date: Jul 2008

Publication Type(s): Letter Case Reports

PubMedID: 17655948

Abstract: Acute myocardial infarction (AMI) in pregnancy is rare and has a high mortality rate of 37-50%. The most important risk factors are advanced maternal age, hypertension and diabetes mellitus. Although thrombolytic therapy, percutaneous transluminal coronary angioplasty (PTCA) and coronary artery by-pass grafting can be performed, primary PTCA and antiplatelet agents have recently improved prognosis. We here present a case of AMI in a 43 year old woman in the 20th week of pregnancy treated successfully with aspirin, clopidogrel and intracoronary stenting without any complications.

Database: Medline

5. Drug-eluting stent implantation for acute myocardial infarction during pregnancy with use of glycoprotein IIb/IIIa inhibitor, aspirin and clopidogrel.

Author(s): Al-Aqeedi, Rafid Fayadh; Al-Nabti, Abdulrahman D

Source: The Journal of invasive cardiology; May 2008; vol. 20 (no. 5); p. E146

Publication Date: May 2008

Publication Type(s): Case Reports Journal Article

PubMedID: 18460716

Abstract: Acute myocardial infarction (AMI) during pregnancy, though rare, is nevertheless associated with a high mortality rate ranging from 37-50%. Percutaneous coronary intervention (PCI) with stenting is considered to be one of the more challenging therapeutic strategies in the management of AMI during pregnancy. We report a case of a 44-year-old pregnant woman who presented with an AMI. She underwent PCI using a drug-eluting stent (DES) with eptifibatide, aspirin and clopidogrel without complications, and later delivered a healthy infant at 36 weeks of gestation. With a tendency towards an increased proportion of births by older women, AMI during pregnancy may become more frequent. The risks and benefits of DES placement and the use of adjuvant antiplatelet therapy for coronary interventions during pregnancy are discussed here.

Database: Medline

6. Clopidogrel and pregnancy: a situation pregnant with danger?

Author(s): Kuczkowski, Krzysztof Marek

Source: Archives of gynecology and obstetrics; Oct 2009; vol. 280 (no. 4); p. 693-694

Publication Date: Oct 2009

Publication Type(s): Letter Case Reports

PubMedID: 19340437

Available at [Archives of gynecology and obstetrics](#) - from SpringerLink - Medicine

Database: Medline

7. Case report: successful pregnancy and delivery after myocardial infarction and essential thrombocythemia treated with clopidogrel.

Author(s): Klinzing, P; Markert, U R; Liesaus, K; Peiker, G

Source: Clinical and experimental obstetrics & gynecology; 2001; vol. 28 (no. 4); p. 215-216

Publication Date: 2001

Publication Type(s): Case Reports Journal Article

PubMedID: 11838740

Abstract:We describe a case of a woman with essential thrombocythemia (ET) who had a subsequent successful pregnancy after a myocardial infarction and aortocoronary bypass grafting. We report the therapeutic management with clopidogrel and low molecular weight heparin. A healthy child was born spontaneously after 41 weeks of pregnancy. The placenta was morphologically normal. No maternal cardiac problems occurred.

Database: Medline

8. Anaesthetic considerations in a parturient with critical coronary artery disease and a drug-eluting stent presenting for caesarean section.

Author(s): Cuthill, J A; Young, S; Greer, I A; Oldroyd, K

Source: International journal of obstetric anesthesia; Apr 2005; vol. 14 (no. 2); p. 167-171

Publication Date: Apr 2005

Publication Type(s): Case Reports Journal Article

PubMedID: 15795152

Abstract:A parturient presented with her first symptoms of coronary artery disease at 18 weeks' gestation. Following an angiogram, a drug-eluting stent was inserted, resulting in resolution of her symptoms. The patient was prescribed anti-platelet medication including clopidogrel. She was delivered by elective caesarean section at 35 weeks under general anaesthesia. The anaesthetic management is discussed and a review of the literature presented.

Database: Medline



9. Case study-pregnancy after CABGDR

Author(s): Rajan K.

Source: International Journal of Gynecology and Obstetrics; Oct 2015; vol. 131

Publication Date: Oct 2015

Publication Type(s): Conference Abstract

Abstract: Objectives: Clinical diagnosis in a young woman presenting with chest pain may be difficult as it is not common to suspect coronary disease. Method: A 31 year old lady underwent coronary artery bypass graft for critical left main coronary branch ostial stenosis of 99%. A coronary artery bypass graft was performed with LIMA graft to LAD and RIMA graft to OM1 for 99% left main stem stenosis. After 7 years she presented in her third pregnancy. Since she could not tolerate aspirin she was given clopidogrel in pregnancy which was stopped at 34 weeks and at 35 weeks an emergency Caesarean section was performed under general anesthesia for fetal intra uterine growth restriction. When seen in postnatal period both the mother and baby were doing well. Results: Pregnancy following coronary artery bypass graft is very rare. This case is presented because of its rarity as it is unusual for young women to have pregnancy following CABG. Conclusions: There is limited information on Clopidogrel usage in pregnancy. If monitored closely and stopped well in advance intra or postpartum hemorrhage with Clopidogrel could be avoided.

Database: EMBASE

10. Successful primary percutaneous coronary intervention in the first trimester of pregnancy.

Author(s): Babic, Zdravko; Gabric, Ivo Darko; Pintaric, Hrvoje

Source: Catheterization and cardiovascular interventions : official journal of the Society for Cardiac Angiography & Interventions; Mar 2011; vol. 77 (no. 4); p. 522-525

Publication Date: Mar 2011

Publication Type(s): Case Reports Journal Article

PubMedID: 21351227

Available at [Catheterization and cardiovascular interventions : official journal of the Society for Cardiac Angiography & Interventions](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Abstract: A 28-year-old patient, medical nurse, in 10th week of her second pregnancy suffered ventricular fibrillation just after entering the waiting room of the emergency department. After she was successfully defibrillated, electrocardiography revealed a large acute anteroseptolateral ST elevation myocardial infarction. Urgent coronarography was done (premedication with 300 mg of aspirin and 600 mg of clopidogrel) with 90 min door-to-balloon time. Proximal left anterior descending occlusion was found, primary percutaneous coronary intervention was done using Amazonia CroCo 3.0/12 bare-metal stent, and Thrombolysis in Myocardial Infarction III flow was achieved. During the procedure, the patient was wrapped in lead apron. Because of postresuscitatory agitation, procedure was done in intravenous anesthesia. The revealed risk factors were smoking and hypercholesterolemia. PAI-1 gene 4G/4G genotype and Apo E gene E2/E4 genotype were also found. Estimated X-ray dosage that fetus received during the procedure was 0.45 mSv, which is less than the upper safe limit in pregnancy. All drugs given to our patient (clopidogrel, aspirin, ivabradine, bisoprolol, anesthetics, low-molecular-weight heparin, and unfractionated heparin) have B or C Food and Drug Administration Pregnancy Category. Fetal ultrasonography showed normal fetal growth, and, after consultation with our team, the patient decided to maintain the pregnancy. Before discharge echocardiography showed left ventricle of normal size with anteroseptolateral hypokinesia, small apical aneurysm, left ventricular ejection fraction of 40-45%, and diastolic dysfunction grade II, without pulmonary hypertension. At the 36th week of pregnancy, the patient was hospitalized and closely monitored; clopidogrel and aspirin were discontinued, and low-molecular-weight heparin was administered. She gave birth to a normal boy by vaginal delivery with epidural anesthesia and without any complication.

Database: Medline

11. Myocardial infarction in the 31st week of pregnancy--case report.

Author(s): Duarte, Filipa Pires; O'Neill, Patrícia; Centeno, Maria João; Ribeiro, Isabel; Moreira, João

Source: Revista brasileira de anestesiologia; 2011; vol. 61 (no. 2); p. 120

Publication Date: 2011

Publication Type(s): Case Reports Journal Article

PubMedID: 21474030

Available at [Revista brasileira de anestesiologia](#) - from Unpaywall

Abstract: BACKGROUND AND OBJECTIVE The occurrence of acute myocardial infarction (AMI) during pregnancy is rare. The authors describe the case of MI in a 31-week pregnant woman and the importance of a multidisciplinary team for its approach. CASE REPORT Thirty-one week pregnant woman with history of smoking, alcoholism and hypertension was admitted after an episode of syncope. On admission she was conscious and asymptomatic, although hypotensive. The electrocardiogram showed marked ST-segment elevation in D1, aVL, V1-V6. The cardiac enzymes were positive. The transthoracic echocardiogram showed reduction in septal and left ventricular contractility and an ejection fraction of 30%. Angiography revealed proximal occlusion of the left anterior descending artery. After a non-successful balloon angioplasty, a metallic stent was placed.

The patient started therapy with beta-blockers, aspirin and clopidogrel. As for the delivery, we chose to perform a cesarean section four weeks after MI. Clopidogrel was suspended seven days before delivery. The preoperative cardiac function was improved by infusion of levosimendan started the day before. Cesarean section occurred under epidural block. The intraoperative period showed no complications, except for mild hypotension easily corrected with phenylephrine. The Apgar score for the newborn was 9/10. CONCLUSION This is one of the few cases of myocardial infarction and angioplasty reported during pregnancy. The authors discuss the decisions taken by the multidisciplinary team consisting of anesthesiologists, obstetricians, neonatologists and cardiologists, particularly with regard to dual antiplatelet therapy, the type of delivery and anesthesia.

Database: Medline

12. Pregnancy-associated spontaneous coronary artery dissection: impact of medical treatment. Case report and systematic review.

Author(s): Maeder, M; Ammann, P; Drack, G; Rickli, H

Source: Zeitschrift fur Kardiologie; Dec 2005; vol. 94 (no. 12); p. 829-835

Publication Date: Dec 2005

Publication Type(s): Case Reports Journal Article Review Systematic Review

PubMedID: 16382385

Abstract: We report on a 22-year-old woman with postpartum dissection of the left anterior descending artery and the intermediate branch. The patient was treated with acetylsalicylic acid (ASA), clopidogrel, and betablocker only. Coronary angiography performed 20 months later revealed complete resolution of the dissection sites. The patient's cardiovascular risk factors included mild smoking and high total cholesterol and low-density-lipoprotein-cholesterol levels, which showed a marked fall after pregnancy without pharmacological cholesterol-modifying therapy raising the question whether pregnancy-related hypercholesterolemia contributed to the pathogenesis of pregnancy-associated spontaneous coronary artery dissection (P-SCAD). In a systematic review of the literature, 16 women [median age 34 (31-36.5) years] with P-SCAD and angiographic follow-up were identified. The majority (69%) of P-SCAD cases occurred postpartum [median time after delivery: 13 (7-21) days]. In 10/16 (63%) patients medical treatment including betablocker and antiplatelet therapy was given leading to complete resolution of the dissection in 5 of them (31% of all patients) at follow-up, whereas in the other 5 patients the dissections were persisting or even progressive. Of the medically treated patients, 80% were free of symptoms suggestive for ischemia at follow-up. In 5/16 patients percutaneous coronary intervention (PCI) was performed as first-line therapy. Three patients underwent coronary artery bypass grafting, which was performed primarily



in one patient, and secondarily in two patients with persisting dissections and ongoing ischemic symptoms after previous medical treatment or PCI without stenting, respectively. In conclusion, medical treatment including ASA, clopidogrel and betablocker therapy results in an excellent clinical and angiographic result in approximately one third of patients with P-SCAD.

Database: Medline

13. Successful pregnancy and delivery on prasugrel treatment: considerations for the use of dual antiplatelet therapy during pregnancy in clinical practice.

Author(s): Tello-Montoliu, Antonio; Seecheran, Naveen A; Angiolillo, Dominick J

Source: Journal of thrombosis and thrombolysis; Oct 2013; vol. 36 (no. 3); p. 348-351

Publication Date: Oct 2013

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

PubMedID: 23143651

Available at [Journal of thrombosis and thrombolysis](#) - from SpringerLink - Medicine

Available at [Journal of thrombosis and thrombolysis](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract: Ischemic heart disease is uncommon during pregnancy, occurring in approximately 1/10,000 pregnancies resulting in live births. However, the increased age and fertility of mothers has suggested that the coexistence of pregnancy and coronary artery disease is likely to increase. A subject of debate is the management of dual antiplatelet therapy among pregnant women. The potential teratogeneous effects, particularly with regards to thienopyridines, on the fetus are not fully established. In addition, the use of dual antiplatelet therapy is associated with an increased risk for bleeding events, raising concerns in the peripartum period with regards to the route of delivery and choice of anesthetic techniques. Limited data and experience is available with clopidogrel, the most commonly used thienopyridine. Prasugrel is third generation thienopyridine recently

introduced into clinical practice with ever growing use in the setting of acute coronary syndrome patients undergoing percutaneous coronary interventions. The present manuscript describes the first case report of a pregnancy while on prasugrel therapy.

Database: Medline

14. Acute Coronary Syndrome During Pregnancy: A Case Report and Literature Review.

Author(s): Yilmaz, Sabiye; Sahinkus, Salih; Kilic, Harun; Gunduz, Huseyin; Akdemir, Ramazan

Source: Turkish journal of emergency medicine; Sep 2014; vol. 14 (no. 3); p. 135-138

Publication Date: Sep 2014

Publication Type(s): Case Reports

PubMedID: 27331184

Available at [Turkish journal of emergency medicine](#) - from Europe PubMed Central - Open Access

Available at [Turkish journal of emergency medicine](#) - from Unpaywall

Abstract: A 32-year-old multiparous woman who presented with chest pain at seven weeks gestation was admitted to our hospital 35 minutes after the onset of symptoms. Sudden cardiac arrest developed while the patient was waiting in the triage room. Cardiopulmonary resuscitation was performed, and the patient was immediately intubated. Electrocardiography revealed an inferior myocardial infarction. The patient underwent coronary angiography, which revealed slow coronary flow of the circumflex and left anterior descending coronary arteries. For treatment, the combination of aspirin with clopidogrel and unfractionated heparin was initiated. She had previously had three healthy children and hadn't had any problems during her previous pregnancies. She had a history of family and smoking, but no history of other coronary risk factors such as diabetes mellitus, hypertension, or dyslipidemia. She was discharged home on day five after admission with clopidogrel, aspirin and a beta-blocker with close outpatient follow-up. Elective abortion was planned for two weeks after the myocardial infarction.

Database: Medline

15. Acute myocardial infarction during pregnancy: a clinical checkmate.

Author(s): Jaiswal, Abhishek; Rashid, Mahjabeen; Balek, Mark; Park, Chong

Source: Indian heart journal; 2013; vol. 65 (no. 4); p. 464-468

Publication Date: 2013

Publication Type(s): Case Reports Journal Article

PubMedID: 23993012

Available at [Indian heart journal](#) - from Europe PubMed Central - Open Access

Available at [Indian heart journal](#) - from Unpaywall

Abstract: Acute myocardial infarction (AMI) in pregnancy is associated with high morbidity and mortality. Management of these patients can be challenging as little is known about the optimal management strategy. Medications routinely used may have harmful effects on the pregnancy outcome. In addition, AMI could occur in the absence of atherosclerotic disease. We describe optimal management strategy by eliciting the management of a 45-year-old female with ST segment elevation myocardial infarction. We recommend early use of coronary angiography to define the pathology in such cases. Radial artery access should be preferred. Pregnant patients with AMI due to

atherosclerotic disease should be given a 325 mg of aspirin and 600 mg of clopidogrel and either balloon angioplasty or bare metal stent should be used for revascularization. Percutaneous coronary intervention with heparin is preferred over bivalirudin and later should be reserved for patients with severe heparin allergy.

Database: Medline

16. Caesarean delivery during dual antiplatelet therapy after acute myocardial infarction and stenting

Author(s): Vitezica I.; Von Heymann C.; Henrich W.; Bamberg C.

Source: Case Reports in Perinatal Medicine; 2017; vol. 6 (no. 2)

Publication Date: 2017

Publication Type(s): Article

Abstract: Cardiac disease is the leading cause of maternal mortality during pregnancy in high-resource countries. A 31-year-old woman had an ST-elevated myocardial infarction (STEMI) at 16 gestational weeks. The patient received three coronary drug-eluting stents followed by dual antiplatelet therapy (DAPT) with aspirin and clopidogrel. An elective caesarean delivery was performed under general anesthesia at 37+1 gestational weeks. Due to subnormal response to clopidogrel, administration was paused only 24 h perioperatively without bridging with tirofiban because of the slightly increased risk of stent thrombosis in clopidogrel nonresponders. There was no postoperative bleeding. There is a lack of evidence-based guidelines regarding the management of acute myocardial infarction (AMI) during pregnancy; thus, delivery should be performed in a tertiary center with a multidisciplinary approach. Copyright © 2017 Walter de Gruyter GmbH, Berlin/Boston.

Database: EMBASE

17. Maternal and fetal outcome in pregnancy with Ischaemic heart disease: A case report

Author(s): Akhtar S.

Source: BJOG: An International Journal of Obstetrics and Gynaecology; Nov 2017; vol. 124 ; p. 25-26

Publication Date: Nov 2017

Publication Type(s): Conference Abstract

Available at [BJOG: An International Journal of Obstetrics and Gynaecology](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Available at [BJOG: An International Journal of Obstetrics and Gynaecology](#) - from Unpaywall

Abstract: Background Acute myocardial infarction (AMI) is a rare event in women of childbearing age. However, in pregnancy the relative risk is approximately 3-4 times higher. UKOSS noted the incidence of reported non-fatal antenatal acute myocardial infarction as 0.7 cases per 100 000



maternities. Advances in PCI (percutaneous coronary intervention) have reduced mortality from 37% to 5%. Risk of AMI is 30 times higher in women over the age of 40 years. ECG, Echocardiography, Trop T and Angiography are important diagnostic tools. Case 38-year-old, P3, at 6 weeks of gestation, was referred to antenatal clinic by cardiologist. She had AMI treated with PPCI (using drug eluting stenting of right coronary artery). Her baseline echocardiogram showed moderate LV and severe RV function impairment. 6 weeks following PCI, she had positive pregnancy test. She was on ACE inhibitors, aspirin and ticagrelor (antiplatelet). MDT involvement in her care. ACE inhibitors/ticagrelor were switched to clopidogrel/beta blocker and later to Clexane (Sanofi, Surrey). During late first trimester and second trimester, she had many presentations with chest tightness and breathlessness which responded well to GTN spray. She benefited from diuretics as well. Her subsequent coronary angiogram at 26 weeks was normal. MDT involvement with extensive planning of her antenatal/intrapartum/postpartum period. Clopidogrel was stopped 4 weeks prior to her delivery. She had uneventful caesarean section at 38 weeks and recovered well thereafter. Conclusion As the average maternal age increases, in part due to use of assisted reproductive technology, so may the incidence of AMI in pregnancy. Mode of delivery depends on obstetric indications, although vaginal delivery is preferable due less risk of haemodynamic instability as compared to caesarean section. Limited safety data is available for anti-platelet agent and usage. Our patient wasn't started on statins in pregnancy. There was no fetal anomaly in our patient. In our case PCI before pregnancy favoured the good outcome.

Database: EMBASE

18. Cesarean section under dual-antiplatelet therapy following acute myocardial infarction and stenting in second trimester

Author(s): Vitezica I.; Koch C.; Henrich W.; Bamberg C.; Kaufner L.; Von Heymann C.; Blaschke F.; Dorner T.; Berns M.

Source: Journal of Perinatal Medicine; Oct 2015; vol. 43

Publication Date: Oct 2015

Publication Type(s): Conference Abstract

Available at [Journal of Perinatal Medicine](#) - from Unpaywall



Abstract: Cardiac disease is the leading cause of maternal mortality during pregnancy in high-resource countries. Although an acute myocardial infarction (AMI) is very rare among women in child-bearing age, estimated between 1-7 to 100 000 in literature, we have to expect a rising number of cases caused by the trend of increasing maternal age because of delaying maternity. Interdisciplinary management should be carried out in these high-risk pregnancies by obstetricians, cardiologists, anaesthesiologists, haemostaseologists and neonatologists to ensure the optimal therapy for these women. There is a lack of literature regarding the management of AMI during pregnancy and the optimal delivery mode. We report the case of a 31y old gravida 1 para 1 who had a ST-elevated myocardial infarction (STEMI) at 16 gestational weeks. The angiography showed a total occlusion of the proximal left anterior descending artery (LAD) and non-stenotic atherosclerosis of the circumflex artery (Cx). Ramus intermedius (RIM) showed a 60% stenosis. Right coronary artery (RCA) had a 40-50% stenosis. The patient received three coronary drug eluting stents following a dual antiplatelet therapy (DAPT) with aspirin and clopidogrel within the elective caesarean delivery in 37+1 gestational weeks as the preferred delivery mode. It was performed in general anaesthesia to avoid the risk of epidural hematoma under DAPT. Timing after 37+0 was considered best for the mother minimizing the physiological stress on the cardiovascular system in the last weeks of pregnancy and avoiding the risks of prematurity for the fetus. A Multiplate-Analysis done 10 days before revealed a subnormal response to clopidogrel (49U, normal range 57-113) and a full response to aspirin, therefore clopidogrel was paused only 24h perioperatively without bridging with tirofiban as formerly planned, because of an estimated small risk of stent thrombosis in a non-responder. The patient had an uncomplicated perioperative course. Hemoglobin content was 10,2 g/dl. There was no postoperative bleeding. Prasugrel was initiated 8 hours after the c-section and the recovery was uneventful. The experience of management of an AMI during pregnancy is based on few case reports. There is still no evidence of the optimal therapy and medication of this condition. Pregnancy care and delivery should be performed in a tertiary center in a multidisciplinary approach.

Database: EMBASE

19. Preexisting coronary artery disease in pregnancy-a case report

Author(s): Kattuparambil S.; Beegam M.; Subramaniam K.

Source: Journal of Obstetrics and Gynaecology Research; Oct 2015; vol. 41 ; p. 142

Publication Date: Oct 2015

Publication Type(s): Conference Abstract

Available at [Journal of Obstetrics and Gynaecology Research](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Available at [Journal of Obstetrics and Gynaecology Research](#) - from Unpaywall

Abstract:Background: Coronary artery disease complicates only 0.01% of all pregnancies. For this reason, more exhaustive data on the management of such cases is lacking. Even guidelines on management of cardiovascular disease in pregnant women are scarce focusing on acute myocardial infarction. Safety data on typical cardiac drugs such as statins, angiotensin converting enzyme inhibitors, angiotensin receptor blockers, or novel antiplatelet drugs are also scarce and their effect on the developing human fetus is not well understood. We present a review on the management of such a patient. Case Report: 35 year old, Indian, primi gravida was booked at 13 weeks of pregnancy with a BMI of 27. It was spontaneous conception of DCDA twin pregnancy after 13 years of infertility. She has Type 1 diabetes since 25 years of age, on regular insulin but with poor control of sugars with hypothyroid on thyroxine replacement. She had a history of acute myocardial infarction with stenting done in 2010. She was on ACE inhibitors, betablocker, aspirin, statins, nitrates for 2 years. Beta blockers, ACE inhibitors, aspirin and nitrates was stopped in pregnancy, Aspirin was converted to clopidogrel. Pre pregnancy Cardiac ECHO and lipid profile was normal. She had a regular follow up in clinic with Multidisciplinary team. She developed pre-eclampsia at 34 weeks, commenced initially on labetalol 200 mg BD, then nifedipine 30 mg SR daily. She also developed Obstetric cholestasis at 34 weeks and was started on ursodeoxycholic acid. Elective cesarean section done at 36 weeks under spinal anesthesia, both baby girls were healthy, weighing 1690 & 1570 grams. Total blood loss was about 900 ml and she received uterotonics intraoperatively. Postoperatively she was monitored in high dependency unit for 24 hours, remained stable, continued on insulin, nifedipine, aspirin & clexane, discharged home on fourth day. Discussion: Management of pregnant patients with diabetes who have ischemic heart disease (IHD) remains a challenging clinical dilemma. Counselling of such women regarding pregnancy is best done before conception. Management by trimester should focus on careful monitoring of maternal cardiac status and stabilization of glycemic control without hypoglycaemia. Delivery and postpartum care remain critical in the avoidance of complications and mortality. A multidisciplinary team approach is key in the management of patients with diabetes with IHD during the pregnancy as well as postpartum.

Database: EMBASE



20. Acute myocardial infarction during pregnancy successfully treated with primary percutaneous coronary intervention

Author(s): Balmain S.; McCullough C.T.; Bloomfield P.; Love C.; Hughes R.; Heidemann B.

Source: International Journal of Cardiology; Apr 2007; vol. 116 (no. 3)

Publication Date: Apr 2007

Publication Type(s): Article

PubMedID: 17254645

Abstract: We report a case of a 40 year old pregnant woman who presented with an acute myocardial infarction (AMI) complicated by ventricular fibrillation. She underwent successful primary percutaneous coronary intervention (PCI). With a tendency towards increased maternal age in developed countries, AMI during pregnancy may become a more frequent occurrence. © 2006 Elsevier Ireland Ltd. All rights reserved.

Database: EMBASE

21. Peripartum management of dual antiplatelet therapy and neuraxial labor analgesia after bare metal stent insertion for acute myocardial infarction.

Author(s): Bauer ME; Bauer ST; Rabbani AB; Mhyre JM

Source: Anesthesia and analgesia; Sep 2012; vol. 115 (no. 3); p. 613-615

Publication Date: Sep 2012

Publication Type(s): Case Reports; Journal Article; Research Support, Non-U.S. Gov't

PubMedID: 22584549

Available at [Anesthesia and analgesia](#) - from Free Medical Journals . com

Available at [Anesthesia and analgesia](#) - from Ovid (Journals @ Ovid) - Remote Access

Abstract: A 31-year-old woman at 32 weeks' gestation presented with an ST segment elevation myocardial infarction with subsequent bare metal stent placement. A multidisciplinary team coordinated the delivery plan, including anticoagulation and delivery mode. Because the patient was at high risk for stent thrombosis, clopidogrel was discontinued after 4 weeks and bridged with eptifibatide for 7 days. Eptifibatide was stopped for induction of labor. Twelve hours after eptifibatide was discontinued, hemostatic function was assessed with thromboelastography before initiating neuraxial analgesia. A successful operative vaginal delivery was performed, followed by an uncomplicated recovery. Clopidogrel was resumed 24 hours postpartum.

Database: PubMed

Strategy 674378

#	Database	Search term	Results
1	Medline	exp CLOPIDOGREL/	8359
2	Medline	(CLOPIDOGREL).ti,ab	11666
3	Medline	(1 OR 2)	13385
4	Medline	(pregnan*).ti,ab	466400
5	Medline	exp PREGNANCY/	865551
6	Medline	(4 OR 5)	965645
7	Medline	(3 AND 6)	58
8	EMBASE	exp CLOPIDOGREL/	56629
9	EMBASE	(CLOPIDOGREL).ti,ab	22150
10	EMBASE	(8 OR 9)	57998
11	EMBASE	(pregnan*).ti,ab	596119
12	EMBASE	exp PREGNANCY/	633841
13	EMBASE	(11 OR 12)	850361
14	EMBASE	(10 AND 13)	528
15	EMBASE	*CLOPIDOGREL/	10757
16	PubMed	(CLOPIDOGREL).ti,ab	13590
17	PubMed	(pregnan*).ti,ab	966327
18	PubMed	(16 AND 17)	65