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Date: 15 April 2019

Sources Searched: Embase, Medline, CINAHL.

Management of Ossification of the Endometrium

[See full search strategy](#)

1. Ultrasound features of osseous metaplasia of the endometrium-Case series and review of the literature.

Author(s): Grigore, Mihaela; Pristavu, Anda; Gafitanu, Dumitru

Source: Clinical imaging; 2018; vol. 52 ; p. 260-263

Publication Date: 2018

Publication Type(s): Case Reports Journal Article Review

PubMedID: 30172175

Abstract: Osseous metaplasia of the endometrium is a rare condition characterized by abnormal bone formation in the uterine endometrium. The osseous fragments act like a foreign body in the uterine cavity; thus, infertility, menstrual abnormalities, pelvic pain dysmenorrhea, and dyspareunia are commonly associated. We present a case series of four women with osseous metaplasia of the endometrium with different symptomatology. Two-dimensional endovaginal examination played a primary role in the diagnosis, the characteristic ultrasound pattern being hyperechoic linear or irregular areas within the endometrium casting posterior acoustic shadowing. Three-dimensional ultrasound better demonstrated the irregular appearance and clearly differentiated the osseous metaplasia from an intrauterine device.

Database: Medline

2. Sonographic appearance of endometrial osseous metaplasia.

Author(s): Chotaliya, Ankit B; Saifi, Shenaz G A; Achuthan, Gayathri

Source: Journal of clinical ultrasound : JCU; Oct 2018; vol. 46 (no. 8); p. 536-539

Publication Date: Oct 2018

Publication Type(s): Case Reports

PubMedID: 29517145

Available at [Journal of clinical ultrasound : JCU](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Abstract: Osseous metaplasia of the endometrium is a rare condition characterized by the presence of mature or immature bone in the endometrium. Most cases present with secondary infertility following an abortion or chronic endometritis. Some patients are asymptomatic, while others have menstrual abnormalities such as menorrhagia or oligomenorrhea. Removal of the bony fragments

helps in spontaneous conception. We hereby present two cases of osseous metaplasia of the endometrium with radiological and pathological correlation.

Database: Medline

3. Endometrial osseous metaplasia-case report

Author(s): Abreu M.M.; Wilson C.; Abreu M.L.; Barcelos L.; Cal L.F.

Source: International Journal of Gynecology and Obstetrics; Oct 2018; vol. 143 ; p. 780

Publication Date: Oct 2018

Publication Type(s): Conference Abstract

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

Abstract:Objectives: The presence of bone tissue in the endometrium is a rare condition. The pathophysiology may be explained by bone metaplasia from fibroblasts that become osteoblasts by continuous estrogen stimulation or fetal bone retention that promote osteogenesis in the surrounding endometrium or dystrophic calcification of retained and necrotic tissues, especially after abortion or endometritis. Usually asymptomatic, but the clinical picture may include menstrual disorders, pelvic pain, dysmenorrhea, dyspareunia or secondary sterility. The early treatment with hysteroscopy is the most indicated. Method(s): C.P.F., 26 years old, G1 P0 A1, attended for routine gynecological consultation, three months after being submitted to uterine curettage, in an Emergency Service, due to incomplete abortion. Asymptomatic and with clinical and gynecological examination without abnormalities. The routine pelvic-transvaginal ultrasound showed a hyperechoic image in the endometrium, in a middle third of the uterine cavity, with irregular contours. Result(s): Before the findings of the ultrasonography, an outpatient approach to the uterine cavity was made by hysteroscopy, using a liquid medium, optical of 2.9degree and set of Betock, which showed a hardened, trabeculated white area in the form of coral, located in the posterior wall of the uterus, located in the endometrium, suggestive of bone tissue. In the same act, total resection of the lesion with forceps was performed. The patient was on an outpatient basis and underwent venous sedation. The histological examination confirmed that it was bone metaplasia of the endometrium. Conclusion(s): This case shows the possibility of bone formation in the endometrial tissue, early, after the abortion and the feasibility of the treatment by hysteroscopy, even at the outpatient level, without compromising the obstetric future of the patient.

Database: EMBASE

4. Osseous metaplasia of endometrium: A very rare entity

Author(s): Gupta G.; Mahindru D.; D'Souza A.; Goyal S.

Source: World Journal of Laparoscopic Surgery; May 2017; vol. 10 (no. 2); p. 69-72

Publication Date: May 2017

Publication Type(s): Article

Available at [World Journal of Laparoscopic Surgery](#) - from Unpaywall

Abstract:Introduction: Osseous metaplasia of endometrium is a rare disorder characterized by the presence of mature or immature bone in the endometrium. The rarity of the case and high

probability of missing out, which may lead to delay in appropriate treatment, makes this case of interest. Case report: A 37-year-old lady, married for 10 years P2L2 with previous two lower-segment cesarean section, presented to the gynecology outpatient department with complaints of secondary infertility for past 7 years, irregular menstrual cycles, dysmenorrhea, and dyspareunia. Her general examination and bimanual exploration were normal. On ultrasonography, an echogenic foci was seen casting posterior acoustic shadow. On diagnostic laparohysteroscopy, multiple small coral-like white plaques-bony spicules were seen. They were removed using hysteroscopic forceps and submitted for histopathological study. A histological diagnosis of osseous metaplasia of endometrium was made. She is on follow-up for infertility treatment. Conclusion: Endometrial ossification is a rare finding, which can be misdiagnosed and requires higher degree of suspicion to diagnose the condition properly. Hysteroscopy has been shown to be effective in the diagnosis and treatment of cases of osseous metaplasia of the endometrium associated with infertility. Copyright © 2018, Jaypee Brothers Medical Publishers (P) Ltd. All rights reserved.

Database: EMBASE

5. Endometrial Ossification: An Unusual Cause of Heavy Menstrual Bleeding (HMB).

Author(s): Poddar, Pabashi; Chavan, Komal; Saraogi, Rajendra M; Yadav, Pramila

Source: Journal of obstetrics and gynaecology of India; Oct 2016; vol. 66 ; p. 666-668

Publication Date: Oct 2016

Publication Type(s): Journal Article

PubMedID: 27803539

Available at [Journal of obstetrics and gynaecology of India](#) - from Europe PubMed Central - Open Access

Database: Medline

6. Osseous Metaplasia of Endometrium Managed with Oestrogens.

Author(s): Goel, Alka

Source: Journal of obstetrics and gynaecology of India; Oct 2016; vol. 66 ; p. 651-653

Publication Date: Oct 2016

Publication Type(s): Journal Article

PubMedID: 27803535

Available at [Journal of obstetrics and gynaecology of India](#) - from Europe PubMed Central - Open Access

Database: Medline

7. Osseous Metaplasia and Subsequent Spontaneous Pregnancy Chance: A Case Report and Review of the Literature.

Author(s): Bozdog, Gurkan; Mumusoglu, Sezcan; Dogan, Selen; Esinler, Ibrahim; Gunalp, Serdar

Source: Gynecologic and obstetric investigation; 2015; vol. 80 (no. 4); p. 217-222



Publication Date: 2015

Publication Type(s): Case Reports Journal Article Review

PubMedID: 26575640

Available at [Gynecologic and obstetric investigation](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:BACKGROUNDWhat is not clear as yet is not only the etiology, but also the management of osseous metaplasia. We describe an infertile patient with osseous metaplasia and subsequent pregnancy after treatment and review the literature from infertility perspective.METHODWe presented a 30-year-old woman with 8 years of secondary infertility who conceived spontaneously after removal of osseous tissue by operative hysteroscopy (HS) following one failed in vitro fertilization cycle. The current literature regarding the osseous metaplasia and fertility potential after removal of osseous tissue was also systematically reviewed in which 21 reports (n = 64 women) were eligible.RESULTThe available data suggest that restoration of endometrial cavity with HS or curettage provides a spontaneous pregnancy rate of 54.2% within 12 months.CONCLUSIONAccording to the available data, irrespective from the duration of subfertility, spontaneous pregnancy should be expected for at least 1 year following the 'complete' restoration of endometrial cavity. In that context, further infertility treatments such as assisted reproduction cycles should be postponed, unless there is another reason for infertility.

Database: Medline

8. Osseous Metaplasia of the Endometrium: A Rare Entity.

Author(s): Magudapathi, Chandrakala; Anathakrishnan, Radha; Kalargala, Harika

Source: Journal of obstetrics and gynaecology of India; Oct 2015; vol. 65 (no. 5); p. 342-345

Publication Date: Oct 2015

Publication Type(s): Journal Article

PubMedID: 26405407

Available at [Journal of obstetrics and gynaecology of India](#) - from Europe PubMed Central - Open Access

Database: Medline

9. Endometrial osseous metaplasia-a rare presentation of polymenorrhagia: a case report.

Author(s): Nigar, Asma; Yadav, Yogesh Kumar; Hakim, Seema

Source: Journal of clinical and diagnostic research : JCDR; Apr 2015; vol. 9 (no. 4); p. QD07

Publication Date: Apr 2015

Publication Type(s): Case Reports

PubMedID: 26023606

Available at [Journal of clinical and diagnostic research : JCDR](#) - from Europe PubMed Central - Open Access

Abstract:Endometrial ossification is a rare entity in which bones are found in the uterus. Exact aetiopathogenesis is not known but the most accepted theory is metaplasia of stromal cells into



osteoblast cells result in the formation of bones. The possibility of malignant mixed mullerian tumour should be in the mind of clinician and pathologist while making diagnosis. We hereby report an extremely rare case, which is among very few reported cases in the world, in which endometrial ossification presented in a perimenopausal female with polymenorrhagia. A 41-year-old multiparous patient presented with irregular bleeding per vaginum for the past two years. She was found to be a case of endometrial calcification with osseous metaplasia with presence of bones varying from 7mm - 1.5 cms size in the uterine cavity. She was successfully managed by total abdominal hysterectomy.

Database: Medline

10. Endometrial osseous metaplasia: an unusual cause of infertility.

Author(s): Garg, Deepika; Bekker, Genia; Akselrod, Faina; Narasimhulu, Deepa Maheswari

Source: BMJ case reports; Apr 2015; vol. 2015

Publication Date: Apr 2015

Publication Type(s): Case Reports Journal Article

PubMedID: 25837325

Available at [BMJ case reports](#) - from Europe PubMed Central - Open Access

Abstract: Osseous metaplasia of the endometrium is a rare disorder associated with the presence of bone in the uterine endometrium. Most patients with this condition presenting with infertility do so owing to the presence of a foreign body in the endometrium. We report a case of a 38-year-old woman who presented with secondary infertility due to osseous metaplasia in the endometrial cavity. She conceived spontaneously after hysteroscopic removal of the bony fragments from the uterus. Uterine osseous metaplasia is a rare cause of infertility that can be easily managed by hysteroscopic removal of the bony fragments, which results in return of fertility.

Database: Medline

11. An incidental finding of endometrial osseous metaplasia during office hysteroscopy.

Author(s): Roach, Michelle K; Thomasee, May S

Source: American Journal of Obstetrics & Gynecology; Mar 2015; vol. 212 (no. 3); p. 402.e1

Publication Date: Mar 2015

Publication Type(s): Academic Journal

PubMedID: 25446698

Database: CINAHL

12. Osseous metaplasia of the endometrium and successful hysteroscopic resection: a report of two cases and a review of the literature.

Author(s): Madaan, Monika; Suman, Shweta; Sharma, Raksha; Kapoor, Neeharika; Garg, Priyanka; Raj, Samir Shankar

Source: Asian journal of endoscopic surgery; Feb 2015; vol. 8 (no. 1); p. 63-66

Publication Date: Feb 2015

Publication Type(s): Case Reports Journal Article Review

PubMedID: 25598057

Available at [Asian journal of endoscopic surgery](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Available at [Asian journal of endoscopic surgery](#) - from Unpaywall

Abstract: Osseous metaplasia is a rare disorder of the endometrium that usually leads to secondary infertility and is frequently associated with recurrent abortions. Here we present two cases: one presenting with primary infertility and another presenting with oligomenorrhea. In both cases, vaginal ultrasonography showed an intrauterine structure that appeared hyperechogenic, suggesting calcification. Hysteroscopy revealed multiple white spicules of bony material in the uterine cavity. In both cases, the lesion was treated by hysteroscopic removal without complications. Histology established a diagnosis of endometrial osseous metaplasia. Thus, hysteroscopy was effective in the diagnosis and treatment of endometrial osseous metaplasia. The patient with primary infertility had spontaneous conception of twins 6 months after the procedure.

Database: Medline

13. Osseous metaplasia of the endometrium

Author(s): van der Merwe J.P.; Kruger T.F.; Slabbert D.

Source: South African Journal of Obstetrics and Gynaecology; 2014; vol. 20 (no. 1); p. 37-38

Publication Date: 2014

Publication Type(s): Article

Available at [South African Journal of Obstetrics and Gynaecology](#) - from Free Medical Journals . com

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

Abstract: Osseous metaplasia should be kept in mind as a rare cause of failure to conceive, even in patients with primary infertility. We report a case of osseous metaplasia of the endometrium as a cause of primary infertility and present a literature review. The condition may be more common than expected or generally accepted, and should be kept in mind even in patients with primary infertility. Hysteroscopy is an effective diagnostic as well as treatment modality. The human endometrium contains populations of epithelial progenitor cells and mesenchymal stem cells. These cells are multipotent but rare, and are the most likely origin of the endometrial ossification. The cells can also differentiate into adipogenic and chondrogenic lineages.

Database: EMBASE

14. Endometrial ossification causing secondary infertility.

Author(s): Bougie, Olga; Acharya, Virbala; Haebe, Jeff; Singh, Sukhbir S

Source: Journal of Obstetrics & Gynaecology Canada; Jun 2014; vol. 36 (no. 6); p. 473-473

Publication Date: Jun 2014

Publication Type(s): Academic Journal

PubMedID: 24927182

Database: CINAHL

15. Hysteroscopic aspects of endometrial ossification.

Author(s): Mazzon, Ivano; Grasso, Mario; Favilli, Alessandro; Gerli, Sandro

Source: Journal of minimally invasive gynecology; 2013; vol. 20 (no. 4); p. 408-409

Publication Date: 2013

Publication Type(s): Case Reports Journal Article

PubMedID: 23567096

Database: Medline

16. Endometrial osseous metaplasia: case report with literature review.

Author(s): Patil, Sb; Narchal, S; Paricharak, Dg; More, Ss

Source: Annals of medical and health sciences research; Nov 2013; vol. 3 ; p. S10

Publication Date: Nov 2013

Publication Type(s): Case Reports

PubMedID: 24349836

Available at [Annals of medical and health sciences research](#) - from Europe PubMed Central - Open Access

Available at [Annals of medical and health sciences research](#) - from Unpaywall

Abstract:Endometrial osseous metaplasia is a rare pathological condition with mature bone in the endometrium and can be a cause for menorrhagia and infertility as bone in the endometrium acts like intrauterine contraceptive device. We report one such case with brief review of literature in a 28-year-old woman presenting with history of menorrhagia.

Database: Medline

17. Laparoscopic excision of endometrial ossification; an evolving cause of chronic pelvic pain

Author(s): Lee J.M.; Kwang-Beom L.

Source: Gynecological Surgery; Oct 2013; vol. 10

Publication Date: Oct 2013

Publication Type(s): Conference Abstract

Available at [Gynecological Surgery](#) - from SpringerLink

Available at [Gynecological Surgery](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract:A 27-year-old, gravida 2, para 1 woman with chronic pelvic pain that had lasted for 2 years. On MR finding, bony fragment and intramural uterine hematoma were observed. Laparoscopic mass removal and pathologic examination was performed. Nine months after laparoscopic management, subjective pain symptoms were significantly improved. Introduction: Endometrial ossification is the formation of bone from an endometrial tissue inside the same individual, and has also been described as osseous metaplasia of the endometrium, ectopic intrauterine bone and heterotopic intrauterine bone formation. It is a rare occurrence, with Material and Methods: A diagnostic

laparoscopy performed that revealed a 4 x 4 cm sized whitish solid mass. A laparoscopic mass removal and primary repair was performed in the operating room Results: Histology of the solid tissue fragments was consistent with heterotopic bone formation. Nine month after the removal of the osseous tissue, she kept the improved state Discussion: Endometrial ossification in women without abortive experience is very rare; most women presenting with this condition have recent history of abortion. Therefore, clinicians should consider the possibility of endometrial ossification as a differential diagnosis of chronic pelvic pain.

Database: EMBASE

18. Chronic renal failure and endometrial osseous metaplasia: a hypothetical pathway.

Author(s): Perino A; Mangione D; Svelato A; Forlani F; Gargano F; Incandela D; Coppola MA; Venezia R; Perino, Antonino; Mangione, Donatella; Svelato, Alessandro; Forlani, Francesco; Gargano, Fiorella; Incandela, Domenico; Coppola, Maria Antonietta; Venezia, Renato

Source: Acta Obstetricia et Gynecologica Scandinavica; Jan 2013; vol. 92 (no. 1); p. 118-119

Publication Date: Jan 2013

Publication Type(s): Academic Journal

PubMedID: 22709353

Available at [Acta obstetricia et gynecologica Scandinavica](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Database: CINAHL

19. Endometrial osseous metaplasia and infertility: a case report.

Author(s): Kouakou, F; Loué, V; Kouamé, A; Adjoby, R; Kou, S; Koimé, H; Gbary, E

Source: Clinical and experimental obstetrics & gynecology; 2012; vol. 39 (no. 4); p. 559-561

Publication Date: 2012

Publication Type(s): Case Reports Journal Article

PubMedID: 23444771

Abstract:Endometrial osseous metaplasia is a rare clinical entity. It causes infertility and occurs in more than 80% of cases after an abortion. Various theories have been proposed and the most accepted theory is metaplasia of the stromal cells into osteoblastic cells that produce bone. This disease may be misdiagnosed. However once diagnosed, the complete removal of bone spicules by hysteroscopy allows, in most cases, fertility to be restored. We present the case of a 36-year-old patient nulliparous with a history of abortion for eight years who consulted May 5, 2008 to become pregnant. Detailed examination showed chronic endometritis with bone metaplasia as a possible cause of her infertility. Seven months after complete removal of bone fragments by hysteroscopy, the patient had a spontaneous pregnancy with normal development. She gave birth to a male infant weighing 3,000 g with an Apgar score of 9 at 1 and 5 min. Delivery and postpartum were normal.

Database: Medline

20. Severe endometrial ossification with subsequent conception and placenta accreta: A case report

Author(s): Lloyd J.; Marcus S.

Source: American Journal of Obstetrics and Gynecology; Sep 2012; vol. 207 (no. 3)

Publication Date: Sep 2012

Publication Type(s): Article

PubMedID: 22789522

Abstract:We report a severe case of endometrial ossification, requiring multiple hysteroscopies to restore fertility. Subsequent spontaneous conception occurred but there was a placenta previa and accreta. Treatment of severe endometrial ossification may increase the risk of morbidly adherent placenta, presumably due to damage to endometrium, leading to abnormal placentation. © 2012 Mosby, Inc.

Database: EMBASE

21. Endometrial ossification in postmenopausal women

Author(s): Ogbonmwan S.E.O.; Cher G.

Source: Journal of Obstetrics and Gynaecology; Nov 2011; vol. 31 (no. 8); p. 774-776

Publication Date: Nov 2011

Publication Type(s): Article

PubMedID: 22085080

Database: EMBASE

22. Osseous metaplasia of the cervix and endometrium: a case of secondary infertility.

Author(s): Polat, Ibrahim; Sahin, Orhan; Yildirim, Gonca; Karaman, Erbil; Erim, Adnan; Tekirdag, Ali Ismet

Source: Fertility and sterility; Jun 2011; vol. 95 (no. 7); p. 2434

Publication Date: Jun 2011

Publication Type(s): Case Reports Journal Article

PubMedID: 21377672

Abstract:OBJECTIVE To report a case of osseous metaplasia of the cervix and endometrium as a cause of secondary infertility. DESIGN Case report. SETTING Istanbul Bakirkoy Women and Children Teaching and Research Hospital. PATIENT(S) A 31-year-old patient with secondary infertility owing to osseous metaplasia of the endometrium and cervix in whom uterine perforation occurred during the removal of bone fragments. INTERVENTION(S) Diagnostic and operative hysteroscopy and laparotomy. MAIN OUTCOME MEASURE(S) Visualization of the disappearance of the osseous metaplasia region with transvaginal ultrasound examination after the hysteroscopy intervention. RESULT(S) Osseous metaplasia lesions are removed by operative hysteroscopy. During this operation, laparotomy was done because of perforation of the uterine wall, and the perforated area was repaired. Two weeks after surgery, the patient underwent a transvaginal ultrasound examination, and the abnormal ultrasound appearance had resolved. CONCLUSION(S) As a rare cause of infertility, osseous metaplasia can be seen in the cervix and the endometrium. If osseous



metaplasia is deep enough during operative hysteroscopy, uterine perforation may occur. Clinicians must be careful for this reason, especially in cases of deep osseous metaplasia.

Database: Medline

23. Laparoscopic excision of endometrial ossification; An evolving cause of chronic pelvic pain

Author(s): Ki K.-D.; Jung S.-K.; Huh C.-Y.; Choi Y.-J.

Source: Journal of Minimally Invasive Gynecology; 2010; vol. 17 (no. 6)

Publication Date: 2010

Publication Type(s): Conference Abstract

Abstract: Study Objective: To present an endometrial osseous metaplasia case and reemphasize that the condition is a cause of chronic pelvic pain. Design: Case report. Setting: University-affiliated teaching hospital. Patients: A 27-year-old, gravida 2, para 1 woman with chronic pelvic pain that had lasted for 2 years. On MR finding, bony fragment and intramural uterine hematoma were observed. Intervention: Laparoscopic mass removal and pathologic examination was performed. Measurements and Main Results: Four months after laparoscopic management, subjective pain symptoms were significantly improved. Conclusion: Clinicians should keep in mind this rare disorder in patient with chronic pelvic pain.

Database: EMBASE

24. Osseous metaplasia of the endometrium.

Author(s): Gulec, Umran Kucukgoz; Parlakgumus, H Ayse; Kiliçdag, Esra Bulgan; Bolat, Filiz; Bagis, Tayfun

Source: BMJ case reports; Aug 2010; vol. 2010

Publication Date: Aug 2010

Publication Type(s): Case Reports Journal Article

PubMedID: 22766572

Available at [BMJ case reports](#) - from Europe PubMed Central - Open Access

Available at [BMJ case reports](#) - from HighWire

Available at [BMJ case reports](#) - from Unpaywall

Abstract: Osseous metaplasia of the endometrium is very rare finding, and usually these cases presented with secondary infertility. Other symptoms are pelvic pain, dyspareunia, menstrual irregularities, vaginal discharge and the passage of bony fragments in menstrual blood. Suspicious lesion could see by hysterosalpingography or by ultrasonography; however, conclusive diagnosis and treatment tool is hysteroscopy. The aetiology is unknown, but theories include retained fetal bone and osseous metaplasia of endometrial tissue. We present a patient with osseous metaplasia who had treated with hysteroscopy.

Database: Medline

25. Endometrial osseous metaplasia: Clinicopathological study of a case and literature review.

Author(s): Umashankar, T; Patted, Shobhana; Handigund, Rs

Source: Journal of human reproductive sciences; May 2010; vol. 3 (no. 2); p. 102-104

Publication Date: May 2010

Publication Type(s): Case Reports

PubMedID: 21209755

Available at [Journal of human reproductive sciences](#) - from Europe PubMed Central - Open Access

Abstract:Endometrial osseous metaplasia is an uncommon clinical entity with the presence of bone in the endometrium. Most of the cases clinically present with secondary infertility following an abortion. Various theories have been proposed and the most accepted theory is metaplasia of the stromal cells into osteoblastic cells that produce the bone. It is important to distinguish this condition from the mixed mullerian tumor of the endometrium to avoid hysterectomy. Removal of these bony bits leads to spontaneous conception. We present one such case in a 25-year-old female patient presented with secondary infertility.

Database: Medline

26. Ossifying luteinized thecoma of the ovary with endometrial adenocarcinoma.

Author(s): Pervatkar, S K; Rao, R; Dinesh, U S

Source: Indian journal of pathology & microbiology; 2009; vol. 52 (no. 2); p. 222-224

Publication Date: 2009

Publication Type(s): Case Reports Journal Article

PubMedID: 19332920

Available at [Indian journal of pathology & microbiology](#) - from Free Medical Journals . com

Abstract:Luteinized thecomas are one of the sex cord stromal tumors of the ovary rarely undergoing ossification. We report a case of a 66-year-old post-menopausal female with the chief complaint of uterine bleeding of 7 months duration. Endometrial curettage performed showed features of endometrial adenocarcinoma. Follow-up total abdominal hysterectomy revealed bilateral luteinized thecomas of the ovary, one of which had undergone massive ossification converting the ovary into a bone. True bone formation in ovarian tumors is rare. This case is the second in the literature of osseous metaplasia in an ovarian luteinized thecoma, with the association of endometrial adenocarcinoma suggesting its functional status.

Database: Medline

27. Osseous metaplasia of the endometrium associated with infertility: a case report and review of the literature.

Author(s): Rosa-E-Silva, Julio César; Barcelos, Ionara Diniz; Navarro, Paula Andrea; Rosa-E-Silva, Ana Carolina Japur de Sá; Nogueira, Antonio Alberto; Ferriani, Rui Alberto

Source: Journal of medical case reports; Sep 2009; vol. 3 ; p. 7427

Publication Date: Sep 2009

Publication Type(s): Journal Article

PubMedID: 20687904

Available at [Journal of medical case reports](#) - from BioMed Central

Abstract:INTRODUCTIONEndometrial ossification is an uncommon disease related to secondary infertility and its etiology and pathogenesis are controversial. More than 80% of reported cases occur after pregnancy.CASE PRESENTATIONA 33-year-old Caucasian woman was admitted with a history of secondary infertility and with a regular menstrual cycle. She reported a miscarriage at 12 weeks of gestation 7 years previously and subsequent dilatation and curettage in another medical facility. Vaginal ultrasound was performed and showed an intrauterine structure described as a hyperechogenic image suggesting calcification related to chronic endometritis. Office hysteroscopy revealed a wide endometrial cavity and proliferative endometrium, with a coral-like white plaque 1.5 cm in length on the right horn and posterior wall of the uterus. The lesion was treated by hysteroscopy without complications. Microscopic examination showed endometrial tissue with osseous metaplasia in the stroma. Nine months after the procedure, the patient became pregnant spontaneously.CONCLUSIONIn our patient, hysteroscopy was effective in the diagnosis and treatment of osseous metaplasia of the endometrium associated with infertility.

Database: Medline

28. Fertility after hysteroscopic management of osseous metaplasia of the endometrium.

Author(s): Lousquy, Ruben; Deffieux, Xavier; Gervaise, Amélie; Faivre, Erika; Frydman, René; Fernandez, Hervé

Source: International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics; Sep 2009; vol. 106 (no. 3); p. 254-255

Publication Date: Sep 2009

Publication Type(s): Journal Article

PubMedID: 19428009

Available at [International journal of gynaecology and obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Database: Medline



29. True osseous metaplasia of the endometrium: the bone is not from a fetus.

Author(s): Cayuela, Enrique; Perez-Medina, Tirso; Vilanova, Joan; Alejo, Maria; Cañadas, Paz

Source: Fertility and sterility; Apr 2009; vol. 91 (no. 4); p. 1293

Publication Date: Apr 2009

Publication Type(s): Case Reports Journal Article

PubMedID: 19185859

Abstract:OBJECTIVE To identify the origin of calcified tissue in endometrial ossification. DESIGN DNA analyses from the ossified tissue and from the woman were studied to compare both genotypes. SETTING University and general hospitals. PATIENT(S) A 27-year-old infertile woman diagnosed of osseous metaplasia of the endometrium. INTERVENTION(S) Hysteroscopic resection of the endometrial osseous metaplasia for DNA analysis. MAIN OUTCOME MEASURE(S) DNA comparison between the patient and the osseous tissue extracted from the uterus. RESULT(S) All markers produced the same allele length for both blood and endometrial biopsy (including bones), thus confirming the same genetic origin. CONCLUSION(S) Endometrial ossification is derived from the patient, resulting in a true osseous metaplasia.

Database: Medline

30. Endometrial osseous metaplasia mimicking retained intrauterine device: a case report.

Author(s): Tsai, Ming C; Arunamata, Alisa; Tristan, Sigrid; Randall, Hugh W

Source: The Journal of reproductive medicine; Nov 2008; vol. 53 (no. 11); p. 877-880

Publication Date: Nov 2008

Publication Type(s): Case Reports Journal Article

PubMedID: 19097523

Abstract:BACKGROUND Osseous metaplasia of the endometrium is a rare disorder and can be associated with infertility. Although successful diagnosis and treatment have been widely reported, correct diagnosis in many cases still represents a challenge. CASE A 40-year-old woman complaining of infertility presented with a diagnosis of retained intrauterine device (IUD) on ultrasound. Hysteroscopy revealed a normal endometrial cavity, but no IUD was visualized. Curettage pathology specimens showed chronic endometritis and calcification. Repeat hysteroscopy was performed because of persistent echogenic foci in the endometrium on follow-up ultrasound. Several irregular and calcified plaques were successfully removed. CONCLUSION Osseous metaplasia can be misdiagnosed because of its rare incidence. Physicians should be aware of osseous metaplasia in the differential diagnosis of patients with uncertain history who present with a sonographic image resembling an IUD.

Database: Medline

31. Endometrial osseous metaplasia: an evolving cause of secondary infertility.

Author(s): Onderoglu, Lutfu Sabri; Yarali, Hakan; Gultekin, Murat; Katlan, Doruk

Source: Fertility and sterility; Nov 2008; vol. 90 (no. 5); p. 2013

Publication Date: Nov 2008

Publication Type(s): Case Reports Journal Article

PubMedID: 18325514

Abstract:OBJECTIVETo present an endometrial osseous metaplasia case and reemphasize that the condition is a cause of secondary infertility.DESIGNCase report.SETTINGDepartment of Obstetrics and Gynecology in a university hospital in Turkey.PATIENT(S)A 33-year-old multiparous woman was admitted to our institution with secondary infertility that had lasted for 2 years. She had experienced one first-trimester and one second-trimester abortion, 3 years and 2 years ago, respectively. On transvaginal sonography, a linear curvy echogenity was observed.INTERVENTION(S)Hysteroscopic examination revealed multiple bony spicules, extending perpendicularly from the posterior uterine wall in to the uterine cavity and occupying almost two thirds of the cavity. Thereafter, a resectoscopic excision of the bony spicules was performed.MAIN OUTCOME MEASURE(S)A normal endometrium and uterine cavity.RESULT(S)Two weeks after the operation, ultrasonographic evaluation was in the normal range, and the patient currently is trying to conceive spontaneously.CONCLUSION(S)Although the role of office hysteroscopy in the evaluation of infertile couple is still under debate, clinicians should keep this rare disorder in mind, especially in patients with a history of late abortion, and should evaluate such cases by hysteroscopy when sonographic features are encountered.

Database: Medline

32. Simultaneous ovarian and endometrial osseous metaplasia: a case report.

Author(s): Campo, Sebastiano; Campo, Vincenzo; Zannoni, Gian Franco; Gambadauro, Pietro

Source: The Journal of reproductive medicine; Mar 2007; vol. 52 (no. 3); p. 241-242

Publication Date: Mar 2007

Publication Type(s): Case Reports Journal Article

PubMedID: 17465297

Abstract:BACKGROUNDEndometrial ossification is a rare disease. More than 80% of cases occur after pregnancy, but it has been observed in patients with a history of endometritis, dilation and curettage, and metabolic disorders.CASEA 42-year-old woman presented with osseous metaplasia of both the endometrium and ovaries. At laparoscopy both adnexa were covered with adhesions and were adherent to the posterior wall of the uterus. Following adhesiolysis, calcified nodules were removed from both ovaries with biopsy forceps. Endometrial bone tissue was removed by hysteroscopic resection.CONCLUSIONTo our knowledge, this is the first reported case of osseous metaplasia of both the endometrium and ovaries since all cases described to date in the literature involved only the uterine cavity. Conservative management with endoscopic surgery is effective.

Database: Medline



33. Heterotopic intrauterine bone formation.

Author(s): Louis, L S; Kingman, C E C; Cochrane, G W

Source: Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology; Feb 2007; vol. 27 (no. 2); p. 208-209

Publication Date: Feb 2007

Publication Type(s): Case Reports Journal Article

PubMedID: 17454487

Database: Medline

34. Management of endometrial ossification with office hysteroscopy.

Author(s): Zeyneloglu, H B; Esinler, I; Ozdemir, H; Oktem, M; Kusu, E

Source: Journal of obstetrics and gynaecology : the journal of the Institute of Obstetrics and Gynaecology; Oct 2006; vol. 26 (no. 7); p. 706-707

Publication Date: Oct 2006

Publication Type(s): Case Reports Journal Article

PubMedID: 17071455

Database: Medline

35. Osseous metaplasia: case report and review.

Author(s): Lainas, Trifon; Zorzo, Ioannis; Petsas, Georgios; Alexopoulou, Efthymia; Lainas, Georgios; Ioakimidis, Tasos

Source: Fertility and sterility; Nov 2004; vol. 82 (no. 5); p. 1433-1435

Publication Date: Nov 2004

Publication Type(s): Case Reports Journal Article Review

PubMedID: 15533373

Abstract:OBJECTIVETo discuss, through the experience of a case report and extensive literature review, the best practices for the diagnosis and treatment of osseous metaplasia, which is the cause of secondary infertility.DESIGNCase report.SETTINGIn vitro fertilization unit in Athens.PATIENT(S)A 40-year-old woman with a 10-year history of secondary infertility.INTERVENTION(S)Hysteroscopic diagnosis and removal of the bony fragment.MAIN OUTCOME MEASURE(S)Elimination of secondary infertility caused by osseous metaplasia.RESULT(S)After treatment, the woman underwent an IVF program and a healthy neonate was born with cesarean section.CONCLUSION(S)Hysteroscopy remains the best practice for the diagnosis and removal of endometrial ossifications, causing secondary infertility.

Database: Medline

36. A successful cycle of IVF-ET after treatment of endometrial ossification; case report and review

Author(s): Biervliet F.P.; Maguiness S.D.; Robinson J.; Killick S.R.

Source: Journal of Obstetrics and Gynaecology; Jun 2004; vol. 24 (no. 4); p. 472-473

Publication Date: Jun 2004

Publication Type(s): Review

PubMedID: 15203607

Database: EMBASE

37. Endometrial ossification and infertility: the diagnostic value of different imaging techniques.

Author(s): Ombelet, W; Lauwers, M; Verswijvel, G; Grieten, M; Hinoul, P; Mestdaghe, G

Source: Abdominal imaging; 2003; vol. 28 (no. 6); p. 893-896

Publication Date: 2003

Publication Type(s): Case Reports Journal Article

PubMedID: 14753614

Available at [Abdominal imaging](#) - from ProQuest (Health Research Premium) - NHS Version

Abstract: We present a case of longstanding secondary subfertility caused by endometrial ossification. Of all diagnostic techniques performed, magnetic resonance imaging and hysterosalpingography did not detect the abnormality. Transvaginal ultrasound and computed tomography clearly showed the endometrial pathology. After successful operative hysteroscopy with removal of the osseous tissue, the patient became pregnant spontaneously within 2 months.

Database: Medline

38. Bony fragments in the uterus: an association with secondary subfertility.

Author(s): Basu, M; Mammen, C; Owen, E

Source: Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology; Oct 2003; vol. 22 (no. 4); p. 402-406

Publication Date: Oct 2003

Publication Type(s): Case Reports Journal Article

PubMedID: 14528478

Available at [Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Available at [Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology](#) - from Unpaywall

Abstract: Bone within the uterine cavity is an unusual finding in women with secondary subfertility, and is usually associated with a past history of termination of pregnancy. The etiology is unknown, but theories include retained fetal bone and osseous metaplasia of endometrial tissue. We describe the cases of three subfertility patients, all with a history of surgical termination of pregnancy. Each

patient underwent a hysteroscopy after highly echogenic foci were seen in the uterus on transvaginal ultrasound examination. During hysteroscopy, several coral-like bony fragments were seen and removed by sharp curettage. On histological examination, these fragments were found to be mature, necrotic bone. This case report confirms the importance of routine baseline evaluation of the endometrium in subfertile women with a history of termination of pregnancy.

Database: Medline

39. Successful diagnostic and surgical hysteroscopy for endometrial ossification.

Author(s): Pace, S; Torcia, F; Palazzetti, P L; Piazze, J J; Cipriano, L; Pachì, A

Source: Clinical and experimental obstetrics & gynecology; 2001; vol. 28 (no. 1); p. 24-25

Publication Date: 2001

Publication Type(s): Case Reports Journal Article

PubMedID: 11332583

Abstract: PURPOSE OF INVESTIGATION Diagnostic-operative hysteroscopy was successful in two cases of endometrial ossification, and fertility was restored. METHOD SA 30-year-old and a 32-year-old woman presented at our Department with a history of secondary infertility, complaining of pelvic pain, dysmenorrhea and polymenorrhea which lasted for about one year before admission. Previous ultrasound studies revealed the presence of two bright hyperechogenic bands with posterior shadowing. RESULTS In both cases diagnostic-operative hysteroscopies were performed, displaying osseous fragments which were removed with resectoscopy, mainly mechanically. CONCLUSION Hysteroscopic resection should be the elective treatment for endometrial ossification because it allows complete removal of osseous fragments and reduces the chance of residual synechia. The main objective of hysteroscopy in endometrial ossification is the restitution of conception capability.

Database: Medline

40. Subfertility due to osseous metaplasia of the endometrium treated by hysteroscopic resection

Author(s): Sorinola O.; Kamal N.G.; Condie R.G.; Watts J.F.

Source: Current Obstetrics and Gynaecology; Mar 2000; vol. 10 (no. 1); p. 42-43

Publication Date: Mar 2000

Publication Type(s): Article

Database: EMBASE

41. Endometrial ossification in infertile patients-report of 3 cases.

Author(s): Mohan, H; Nada, R; Mohan, P; Punia, R S; Malhotra, S

Source: The Australian & New Zealand journal of obstetrics & gynaecology; Nov 1999; vol. 39 (no. 4); p. 513-515

Publication Date: Nov 1999

Publication Type(s): Case Reports Journal Article



PubMedID: 10687780

Available at [The Australian & New Zealand journal of obstetrics & gynaecology](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Available at [The Australian & New Zealand journal of obstetrics & gynaecology](#) - from Patricia Bowen Library & Knowledge Service West Middlesex University Hospital NHS Trust (lib302631) Local Print Collection [location] : Patricia Bowen Library and Knowledge Service West Middlesex university Hospital.

Database: Medline

42. Endometrial ossification

Author(s): Muzaffar M.; Mamoon N.; Nigar E.; Mushtaq S.

Source: JPMa. The Journal of the Pakistan Medical Association; Aug 1997; vol. 47 (no. 8); p. 220-221

Publication Date: Aug 1997

Publication Type(s): Article

PubMedID: 9379503

Database: EMBASE

43. Endometrial ossification in a postmenopausal woman.

Author(s): Shimizu, M; Nakayama, M

Source: Journal of clinical pathology; Feb 1997; vol. 50 (no. 2); p. 171-172

Publication Date: Feb 1997

Publication Type(s): Case Reports Journal Article

PubMedID: 9155704

Available at [Journal of clinical pathology](#) - from BMJ Journals - NHS

Available at [Journal of clinical pathology](#) - from Europe PubMed Central - Open Access

Abstract: A case of endometrial ossification in a 62 year old woman is reported. The patient presented with increased vaginal discharge. On transvaginal ultrasonography, a hyperechoic area within the uterine cavity, suggestive of an intrauterine foreign body, was noted. Histological examination of the endometrial curettage showed mature bone with neutrophilic infiltration. There was no evidence of malignancy. Endometrial ossification in postmenopausal women is very rare; most women presenting with this condition are between 20 and 40 years of age. Therefore, clinicians should consider the possibility of endometrial ossification as a differential diagnosis of intrauterine foreign body on ultrasound, even in older patients. In addition, pathologists should be aware of this rare entity to avoid a misdiagnosis of malignant mixed müllerian tumor in the endometrial curettage specimen, which may result in unnecessary hysterectomy.

Database: Medline

44. Osseous metaplasia of the endometrium: a rare cause of infertility and its hysteroscopic management.

Author(s): Bahçeci, M; Demirel, L C

Source: Human reproduction (Oxford, England); Nov 1996; vol. 11 (no. 11); p. 2537-2539

Publication Date: Nov 1996

Publication Type(s): Case Reports Journal Article

PubMedID: 8981150

Available at [Human reproduction \(Oxford, England\)](#) - from Oxford Journals - Medicine

Available at [Human reproduction \(Oxford, England\)](#) - from HighWire - Free Full Text

Abstract: This case report presents a very rare and long-standing cause of infertility, osseous metaplasia of the endometrium, and describes its successful management by hysteroscopy. A woman with a history of induced abortion 12 years ago, failed to conceive from that time on. The infertility work-up was unrevealing except for the presence of intracavitary calcification on ultrasonography. After diagnostic hysteroscopy, solid bony spicules covering the posterior wall of the endometrial cavity were removed by wire loop resectoscope. Histology established the diagnosis of osseous metaplasia of the endometrium. The patient conceived in her second spontaneous cycle and has an ongoing pregnancy at the time of writing. Hysteroscopy was an effective means of extracting this heterotopic tissue, thereby re-establishing fertility even after a long period of infertility.

Database: Medline

45. Ultrasound-guided hysteroscopic management of endometrial osseous metaplasia.

Author(s): Coccia, M E; Becattini, C; Bracco, G L; Scarselli, G

Source: Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology; Aug 1996; vol. 8 (no. 2); p. 134-136

Publication Date: Aug 1996

Publication Type(s): Case Reports Journal Article

PubMedID: 8883319

Available at [Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology](#) - from Wiley Online Library Science , Technology and Medicine Collection 2017

Available at [Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology](#) - from Unpaywall

Abstract: In the past, most cases of osseous metaplasia of the endometrium were diagnosed following removal of bone from the endometrium by dilatation and curettage and frequently subsequently treated by hysterectomy. Nowadays, management involves a suggested diagnosis by transvaginal ultrasound examination, confirmation by hysteroscopy and hysteroscopic removal of ectopic intrauterine bone. This is usually carried out under laparoscopic guidance. However, the degree of visual control provided by combined transabdominal and transrectal ultrasonography may prove sufficiently accurate for hysteroscopic guidance. In this report we describe a case of endometrial osseous metaplasia successfully managed by ultrasound-guided hysteroscopy. The

advantages of our approach include reduced invasiveness, reduced costs and simultaneous visualization of the abdominal and intrauterine cavities. One limitation, however, is represented by the greater operator dependence of ultrasound guidance as compared to laparoscopy, the former requiring extensive training and state-of-the-art equipment. We suggest that ultrasound guidance for hysteroscopic removal of extensive osseous metaplasia may represent a potentially safer and more effective alternative to laparoscopy and would therefore encourage further clinical evaluation of this technique.

Database: Medline

46. Endometrial ossification successfully treated by hysteroscopic resection.

Author(s): Torné, A; Jou, P; Pagano, R; Sanchez, I; Ordi, J; Vanrell, J A

Source: European journal of obstetrics, gynecology, and reproductive biology; May 1996; vol. 66 (no. 1); p. 75-77

Publication Date: May 1996

Publication Type(s): Case Reports Journal Article

PubMedID: 8735764

Abstract:BACKGROUND Endometrial ossification is a rare condition. The common feature in most reported cases is a previous history of abortion and retention of fetal bones. Few cases of endometrial ossification can be explained by osseous metaplasia. Clinical presentation may include abnormal vaginal bleeding or discharge, dysmenorrhoea, pelvic pain, and secondary infertility. Hysterectomy or dilation and curettage have been the usual therapeutic methods used. Recently, some cases have been treated by means of hysteroscopic resection. CASE We report a case of endometrial ossification in a woman who presented with dysmenorrhoea, dyspareunia and pelvic pain. The patient had a pregnancy voluntarily terminated at 16 weeks. Five subsequent routine annual gynaecological exams, including ultrasonographies, were normal. A new gestation was also voluntarily terminated at 6 weeks. One month later the patient started with clinical manifestations. Ultrasonograms performed 4 months after the second abortion revealed a strong uterine echogenic band. Bone tissue was successfully removed by hysteroscopic resection. CONCLUSION This case adds further evidence favouring new bone formation in the uterus as a pathogenic mechanism for endometrial ossification and illustrates the feasibility of hysteroscopic treatment for this condition.

Database: Medline

47. Endometrial bone formation.

Author(s): Bellingham, F R

Source: The Australian & New Zealand journal of obstetrics & gynaecology; Feb 1996; vol. 36 (no. 1); p. 109-110

Publication Date: Feb 1996

Publication Type(s): Case Reports Journal Article

PubMedID: 8775272

Available at [The Australian & New Zealand journal of obstetrics & gynaecology](#) - from Patricia Bowen Library & Knowledge Service West Middlesex University Hospital NHS Trust (lib302631) Local

Print Collection [location] : Patricia Bowen Library and Knowledge Service West Middlesex university Hospital.

Database: Medline

48. Pregnancy achieved after treatment in a case of endometrial ossification. A case report and literature review.

Author(s): Liu, Q; Shi, Q; Su, Y; Yan, X

Source: Chinese medical journal; Oct 1995; vol. 108 (no. 10); p. 793-795

Publication Date: Oct 1995

Publication Type(s): Case Reports Journal Article

PubMedID: 8565673

Database: Medline

49. Endometrial ossification: A cause of secondary infertility

Author(s): Marcus S.F.; Bhattacharya J.; Williams G.; Brinsden P.; Hamou J.

Source: American Journal of Obstetrics and Gynecology; 1994; vol. 170 (no. 5); p. 1381-1383

Publication Date: 1994

Publication Type(s): Article

PubMedID: 8178874

Abstract:Two cases of endometrial ossification with secondary infertility are reported; pelvic ultrasonography suggested an intrauterine foreign body in one case. Hysteroscopy was necessary to make the correct diagnosis and to remove the bony fragments from the two cases. One patient conceived naturally after the bony fragments were removed.

Database: EMBASE

50. Hysteroscopic treatment of ectopic intrauterine bone. A case report.

Author(s): Rodriguez, B D; Adamson, G D

Source: The Journal of reproductive medicine; Jul 1993; vol. 38 (no. 7); p. 515-520

Publication Date: Jul 1993

Publication Type(s): Case Reports Journal Article

PubMedID: 8410844

Abstract:Hysteroscopic removal of ectopic bone in the uterus, using laparoscopic control and ultrasonographic confirmation, was used to treat a patient who presented with a diagnosis of osseous metaplasia of the uterus. Pathologic analysis revealed benign bony tissue consistent with a diagnosis of osseous metaplasia. Laparoscopy and hysteroscopy confirmed the presence of bone in the form of spicules perpendicular to the uterine endometrium. Most of the bone was present in the posterior portion of the fundus. Initial removal was performed with biopsy forceps followed by gentle curettage. The resectoscope was then introduced to visualize any remaining spicules and

remove them by mechanical means with minimal use of electrosurgery. Transvaginal ultrasound assisted in identifying bone and confirming its removal during and after surgery. The hysteroscopic procedure was viewed laparoscopically to reduce the risk of uterine perforation. Dense right adnexal adhesions were also lysed. The patient received conjugated equine estrogens for five weeks post-operatively. Ultrasound showed an intrauterine pregnancy of 5 to 6 weeks plus two small calcifications approximately 1 mm each. The patient delivered a healthy infant and has had no recurrent problems. This case report demonstrates the successful use of multiple diagnostic and treatment modalities in the treatment of ectopic intrauterine bone.

Database: Medline

51. Osseous metaplasia of the endometrium treated by hysteroscopic resection.

Author(s): Acharya, U; Pinion, S B; Parkin, D E; Hamilton, M P

Source: British journal of obstetrics and gynaecology; Apr 1993; vol. 100 (no. 4); p. 391-392

Publication Date: Apr 1993

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

PubMedID: 8494844

Database: Medline

52. Endometrial ossification, an unusual finding in an infertility clinic. A case report

Author(s): Ombelet W.

Source: Journal of Reproductive Medicine for the Obstetrician and Gynecologist; 1989; vol. 34 (no. 4); p. 303-306

Publication Date: 1989

Publication Type(s): Article

PubMedID: 2497252

Abstract: Ectopic bony endometrial tissue was found accidentally during routine diagnostic laparoscopy and curettage that were part of the examination of a woman with a history of primary infertility for seven years. She conceived two months after the second curettage.

Database: EMBASE

53. Hysteroscopic detection of heterotopic intrauterine bone formation.

Author(s): Taylor, P J; Hamou, J; Mencaglia, L

Source: The Journal of reproductive medicine; Apr 1988; vol. 33 (no. 4); p. 337-339

Publication Date: Apr 1988

Publication Type(s): Journal Article

PubMedID: 3367332

Abstract: The diagnosis and management of heterotopic intrauterine bone formation was performed hysteroscopically in nine patients. The presenting symptom was secondary infertility in seven, pelvic

pain in one and passage of bone fragments in one. All nine patients had a history of spontaneous and therapeutic abortion. Hysteroscopy was more accurate than hysterosalpingography in detecting the condition. Four pregnancies occurred in the seven infertile patients following removal of the bone. In four of nine cases there was clear evidence of remaining bone fragments after the initial removal.

Database: Medline

54. Endometrial ossification

Author(s): Purwar M.; Deshpande A.; Jain L.S.

Source: Asia-Oceania journal of obstetrics and gynaecology / AOFG; Sep 1985; vol. 11 (no. 3); p. 399-402

Publication Date: Sep 1985

Publication Type(s): Article

PubMedID: 3936461

Database: EMBASE

55. Endometrial ossification--report of three cases with literature review

Author(s): Shroff C.P.; Kudterkar N.G.; Badhwar V.R.

Source: Indian journal of pathology & microbiology; Jan 1985; vol. 28 (no. 1); p. 71-74

Publication Date: Jan 1985

Publication Type(s): Article

PubMedID: 3938773

Database: EMBASE

56. Endometrial ossification: Unilateral manifestation in a septate uterus

Author(s): Wetzels L.C.G.; Essed G.G.M.; De Haan J.

Source: Gynecologic and Obstetric Investigation; 1982; vol. 14 (no. 1); p. 47-55

Publication Date: 1982

Publication Type(s): Article

PubMedID: 6811378

Abstract: The occurrence of bone in endometrial stroma of a 31-year-old nulligravida who attended the outpatient clinic for infertility is described. A review of the literature is given and the theories

about the etiology are discussed. It seems apparent that in the described patient, only a locally acting cause can explain the findings.

Database: EMBASE

57. Endometrial ossification. A report on two cases

Author(s): Rao B.N.; Persaud V.

Source: West Indian Medical Journal; 1981; vol. 30 (no. 3); p. 153-155

Publication Date: 1981

Publication Type(s): Article

PubMedID: 6794226

Abstract:Two cases of endometrial ossification are reported. In one patient, there were two previous abortions and it seems likely that the phenomenon resulted as a dystrophic change from fetal death in utero. In the second case, there was no history of a previous abortion and the presence of bone and cartilage probably resulted from a metaplastic change in the endometrial stroma. The etiology and pathogenesis of this unusual endometrial change are discussed.

Database: EMBASE

58. Endometrial ossification: Report of an additional case

Author(s): Ceccacci L.; Clancy G.

Source: American Journal of Obstetrics and Gynecology; 1981; vol. 141 (no. 1); p. 103-104

Publication Date: 1981

Publication Type(s): Article

PubMedID: 6791501

Database: EMBASE

59. Endometrial ossification associated with secondary fertility. Case report

Author(s): Dutt S.

Source: British Journal of Obstetrics and Gynaecology; 1978; vol. 85 (no. 10); p. 787-789

Publication Date: 1978

Publication Type(s): Article

PubMedID: 101229

Abstract: A patient with secondary infertility and endometrial ossification after a spontaneous abortion is described. The aetiology and pathogenesis of endometrial ossification are discussed.

Database: EMBASE

60. Endometrial ossification following an abortion

Author(s): Waxman M.; Moussouris H.F.

Source: American Journal of Obstetrics and Gynecology; 1978; vol. 130 (no. 5); p. 587-588

Publication Date: 1978

Publication Type(s): Article

PubMedID: 415613

Abstract: Ossification in the endometrium is a very rare finding. The common feature in most of the described patients is a previous history of abortion. A patient is presented in whom endometrial bone formation was discovered exactly eight weeks following an induced abortion. This may be the shortest period between the abortion and the discovery of the endometrial ossification yet described.

Database: EMBASE



Strategy 636144

#	Database	Search term	Results
1	Medline	("endometrial ossification" OR "ectopic intrauterine bone" OR "heterotopic intrauterine bone").ti,ab	54
2	Medline	(ossificat* ADJ2 endometri*).ti,ab	57
3	Medline	exp OSTEOGENESIS/	30306
4	Medline	exp ENDOMETRIUM/	30858
5	Medline	(3 AND 4)	19
6	Medline	exp "OSSIFICATION, HETEROTOPIC"/	8503
7	Medline	(4 AND 6)	71
8	Medline	("Osseous metaplasia").ti,ab	503
9	Medline	(endometri*).ti,ab	86782
10	Medline	(4 OR 9)	94702
11	Medline	(8 AND 10)	57
12	Medline	(1 OR 2 OR 5 OR 7 OR 11)	137
13	EMBASE	("endometrial ossification" OR "ectopic intrauterine bone" OR "heterotopic intrauterine bone").ti,ab	59
14	EMBASE	(ossificat* ADJ2 endometri*).ti,ab	57



15	EMBASE	(endometri*).ti,ab	119453
16	EMBASE	exp ENDOMETRIUM/	28921
17	EMBASE	(15 OR 16)	123455
18	EMBASE	exp OSSIFICATION/	44860
19	EMBASE	(17 AND 18)	101
20	EMBASE	(13 OR 14 OR 19)	142
21	CINAHL	("endometrial ossification" OR "ectopic intrauterine bone" OR "heterotopic intrauterine bone").ti,ab	4
22	CINAHL	(ossificat* ADJ2 endometri*).ti,ab	4
23	CINAHL	exp ENDOMETRIUM/	2325
24	CINAHL	exp "OSSIFICATION, HETEROTOPIC"/	1909
25	CINAHL	(23 AND 24)	5
26	CINAHL	(21 OR 22 OR 25)	8