

# Clinical Journal of Obstetrics and Gynecology

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## Case Report

Published Date:- 2020-12-03

[Unilateral pleural effusion as the sole presentation of ovarian hyperstimulation syndrome \(OHSS\)](#)

A 44-year-old G4P2+1 presented to the emergency department on the 10th day following embryo transfer (with two fresh, day 5, blastocysts transferred in a hospital abroad) with the complaints of difficulty breathing, chest discomfort and cough for one day. These symptoms increased on lying on her side and were not related to exertion. She also mentioned having had abdominal discomfort over the preceding few days. On taking a past history, the patient revealed that all her prior pregnancies were the result of IVF treatment and she suffered OHSS with each. Her first pregnancy was a triplet gestation through IVF and complicated by OHSS; followed by her second pregnancy which was an IVF twin gestation also complicated by OHSS with ascites requiring paracentesis. With her third IVF treatment she conceived, had OHSS and miscarried spontaneously. However, these IVF treatments and pregnancies were all managed abroad and no medical records were available.

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## Research Article

Published Date:- 2020-12-01

[Chronic endometritis in in vitro fertilization failure patients](#)

Introduction: Chronic endometritis (CE) is a common cause of infertility in asymptomatic patients and its diagnosis and treatments improved assisted reproduction technique outcome in most of the specialized centers. Diagnosis of CE in endometrial biopsy by Hematoxylin and Eosin (H&E) stain is hard to identify chronic inflammatory cells from the stroma and the use of plasma cells-specific stains is helpful.

Aim of the work: Evaluation of the use of CD138 in the identification of plasma cells in endometrial biopsy of patients with previous IVF trial failure.

Material and methods: Hysteroscopic and curettage endometrial biopsies from fifty-five females with previous IVF trial failure were stained with H&E and CD138 immunostaining for detection of plasma cells.

Results: Plasma cells were identified in 52.7% of cases by H&E and in 6/55 by CD138 immunostaining. CD138 is more sensitive in detecting plasma cells in endometrial biopsy than H&E stain. There was a significant statistical correlation between CE and abnormal uterine bleeding, abortion and primary infertility ( $p > 0.5$ ).

Conclusion: Diagnosis of CE is helpful in infertility patients with IVF trial failure to improve the outcome of the maneuver. CD138 is more sensitive for plasma cells specially in endometrial biopsies than H&E.

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## Research Article

Published Date:- 2020-12-01

[Experience with trans radial uterine artery embolisation for uterine fibroids in a tertiary center in Saudi Arabia](#)

Trans-radial uterine artery embolization (UAE) is acknowledged as a non- invasive, cost-effective and safe procedure for the treatment of symptomatic fibroids. However, it is associated with the recurrence of symptoms like abnormal uterine bleeding and pressure symptom in some patients. This is a comparative study of our data with other international data, in the context of percentage reduction in fibroid size, accompanying controlling factors, short and long term follow up data analysis of the first two years was done. Careful pre-procedural counseling of future possibility of fibroid recurrence and means of management should be stressed.

**Materials and methods:** A retrospective cohort study at the Security Forces Hospital in Riyadh, Saudi Arabia, was conducted. The study was done from 1st November 2017-31st October 2019, on symptomatic patients diagnosed with fibroids, who refused surgical treatment.

The outcomes included: fibroid site, size and anatomical position, patients' symptoms, general condition, and early and delayed complications. These data were compared with those from other international studies.

**Results:** The study involved 23 patients (mean age: 39 years). The average percentage reduction in fibroid volume was 49%. There were no major complications and no recurrence of symptoms during the covered period. Data analysis revealed a poor correlation between the overall percentage reduction of fibroid size with fibroid number, age of patients', and body mass indices.

**Conclusion:** Despite poor correlation, we provided preliminary data of the first two years out of the total five-year projected period of the study where it showed effectiveness and relative safety of radial - UAE for fibroid.

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## **Research Article                      Published Date:- 2020-11-30**

[Clinical characteristics, management, maternal and neonatal outcome among seven severe and critically ill pregnant women with COVID-19 pneumonia](#)

Pneumonia caused by the Novel coronavirus disease 2019 (COVID-19) is a highly infectious disease and the ongoing outbreak has been declared as a Pandemic by the World health organization. Pneumonia is a serious disease in pregnancy and requires prompt attention. Viral pneumonia has higher morbidity and mortality compared to bacterial pneumonia in pregnancy. All efforts are well exerted to understand the newly emerged disease features but still some areas are gray.

The treatment is primarily supportive with antivirals, steroids, anticoagulation and antibiotics for secondary bacterial infection. Severe cases require intensive care monitoring with oxygen support, mechanical ventilation. Investigational therapies include convalescent plasma, cytokine release inhibitors and other immunomodulatory agents like interferons. The mortality appears driven by the presence of severe Adult Respiratory Syndrome (ARDS) and organs failure.

COVID pandemic is a challenging and stressful socio-economic situation with widespread fear of infection, disease and death. In the specialty of obstetrics and gynecology, studies are being conducted to ascertain the manifestation of disease in pregnant women and the fetal outcome.

The aim of our case series is to describe the demographics, clinical characteristics, laboratory and radiological findings, feto- maternal outcome of severe and critical COVID pneumonia in pregnant women in Latifa Hospital.

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## **Review Article                      Published Date:- 2020-11-30**

[Overview on current approach on recurrent miscarriage and threatened miscarriage](#)

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Miscarriage is a frequent outcome of pregnancy, with major emotional implications to the couple experiencing such an event. Threatened miscarriage is the commonest complication of early pregnancy and affects about 20% of pregnancies. It presents with vaginal bleeding with or without abdominal cramps. On the other hand recurrent miscarriages are post implantation failures in natural conception. Increasing age of women, smoking, obesity or polycystic ovary syndrome (PCOS) and a previous history of miscarriage are risk factors for threatened miscarriage. The pathophysiology has been associated with changes in levels of cytokines or maternal immune dysfunction. Clinical history and examination, maternal serum biochemistry and ultrasound findings are important to determine the treatment options and provide valuable information for the prognosis. Many surgical and non-surgical interventions are used in the management of threatened and recurrent miscarriages. In this review, we present available evidence-based guidance on the incidence, pathophysiology, investigation and clinical management of recurrent miscarriage and threatened miscarriage, focusing mainly on the first trimester of pregnancy and primary healthcare settings. The review is structured to be clinically relevant. We have critically appraised the evidence to produce a concise answer for clinical practice.

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## Research Article

**Published Date:- 2020-11-04**

### [4-year recurrence risk factors after tension-free vaginal tape-obturator as a treatment of stress urinary incontinence](#)

**Objectives:** Tension-free vaginal tapes are the gold standard of the surgical treatment of stress urinary incontinence (SUI); however, long-term recurrence of SUI after this surgery has been a matter of problem. Here, we attempted to determine the incidence of its recurrence and to identify the risk factors of 4-year-recurrence of SUI after this surgery.

**Methods:** Of all patients undergoing this surgery (n = 341, 2015-2019), 71 patients were met the study inclusion criteria. Of 71, SUI recurred in 8 patients, with the recurrence rate being 11.3%. The following three were identified to be independent risk factors: older age, history of delivery of macrosomic baby (>4 kg), and the presence of mixed urinary incontinence. The frequency of recurrence in cases with mixed incontinence amounted for 19.5%. Recurrence was 22 and 50% for women with macrosomic delivery once and more than twice, respectively.

**Conclusion:** Advanced age, macrosomic delivery and mixed urinary incontinence have shown to be independent risk factors of recurrence of SUI after tension-free vaginal tape-obturator at 4 years.

**Key message:** Stress urinary incontinence can recur so investigate possible risk factors is a priority. Our paper relates recurrence with: advanced age, fetal macrosomia and mixed incontinence.

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## Research Article

**Published Date:- 2020-10-20**

### [Experiment of a novel four-spherical intrauterine contraceptive device with nickel-titanium](#)

The aim of this study was to develop a novel four-spherical intrauterine contraceptive device (4-SIUD) with nickel-titanium (Ni-Ti) for human, and to evaluate the contraceptive effect. The 4-SIUD composed of 4 mesh spheres and 5 support arms. The shape of 4-SIUD was like a "T". The height (H), upper width (D) and thickness of the 4-SIUD for macaques were 0.8 cm, 0.5 cm and 0.3 cm, and for human were 4.5 cm, 4.0 cm and 0.8 cm, respectively. The 4-SIUD was inserted into 5 macaques and pregnancy was not observed at 12 months. Three women used the 4-SIUD for 12 months, uterine perforations, expulsion, pain, and pelvic inflammatory did not occur. The results suggested that the 4-SIUD is appropriate for rhesus macaques and human use, and has a good contraceptive effect.

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## Research Article

**Published Date:- 2020-10-20**

### [Maternal and perinatal outcomes of uterine rupture in Lubumbashi, Democratic Republic of Congo](#)

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**Introduction:** Uterine rupture is one of the peripartum complications, which cause nearly about one out of thirteen maternal deaths. This study aimed to assess the prevalence and associated factors of mortality among women with uterine rupture in referral hospitals of Lubumbashi, in the south east part of the Democratic Republic of Congo.

**Methods:** Institution based cross sectional study was conducted from December 1st, 2012 to 31st, 2016 on uterine rupture. During the study selected 158 women were included by using exhaustive sampling method. Data were checked, coded and analyzed into STATA version 12. Chi-square test was used to identify the predictors of maternal and perinatal mortalities in women with uterine rupture and 95% Confidence Interval of odds ratio at p - value less than 0.05 was taken as a significance level.

**Results:** The overall prevalence of uterine rupture was 0.49%. The average age of the patients was  $29.5 \pm 6.2$  years and 71.52% of them were between 20 and 34 years old; more than 60% had a parity  $\geq 4$  (average parity:  $4.7 \pm 2.5$ ). 81.17% of the cases had a fully ruptured uterus and 51.17% of the uterine ruptures were located in the lower segment. Repair of the pregnant ruptured uterus was performed in 93.04% of the cases and hysterectomy in 5.06%. Maternal and perinatal mortalities were 8.86% and 72.04% respectively. Regarding maternal mortality, no parameter showed a significant association with maternal death. As for perinatal mortality, parity  $\geq 4$ , complete rupture and segmento-corporeal lesion were significantly associated with perinatal death ( $p < 0.05$ ).

**Conclusion:** Uterine rupture remains one of the causes of maternal and perinatal mortality in Lubumbashi. The place occupied by uterine ruptures in obstetric activity requires joint and urgent action by all stakeholders in the health system in order to combat this scourge, witness to poor quality obstetric care.

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## Research Article

**Published Date:- 2020-10-14**

### [Endometrial thickness and frozen thaw embryo transfer: A prospective study](#)

**Aim and objectives:** Endometrial Window of Implantation (WOI) is open in the midsecretory phase wherein the markers of invasion and cell adhesion are manifested .The primary objective was to find out the predictive value of Endometrial thickness and profile as a prognostic factors for embryo transfers during ART.

**Materials and Methods:** Endometrial thickness assessment was performed with grey scale ultrasound on the day of transfer just before thawing the embryos in patients undergoing Frozen embryo transfer cycle after endometrial preparation.

**Results:** The mean age and standard deviation of study population was is  $33.26 \pm 5.95$ . Out of 69 patients there was clinical pregnancy in 33 patients , miscarriage in 10 patients and ongoing pregnancy in 23 patients. So the implantation rate was 47.83% (33/69), early miscarriage rate (pregnancy ending before 12 weeks) was 14.49%(10/69) and the ongoing pregnancy rate was 33.33% (23/69). Endometrial thickness < 6 mm had comparable implantation rates but low ongoing pregnancy rates.

**Conclusion:** The ultrasound morphological and vascular grading of endometrial thickness and vascularity is useful to synchronise Day 5 embryo transfer and window and implantation thereby minimizing the loss of good embryos in nonreceptive endometrium.

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## Research Article

**Published Date:- 2020-10-14**

### [Effect of sperm DNA fragmentation on ICSI outcome: A prospective study](#)

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**Aim and objectives:** The primary aim was to measure the sperm DNA damage and to study the magnitude of sperm DNA damage. Secondary objective was to study the effect of sperm DNA fragmentation on Day 5 Blastocyst expansion (graded 1-5).

**Results:** There is an increase in sperm DNA fragmentation with an increase in age. Increased sperm DNA fragmentation is also associated with abnormal motility and morphology in semen samples. However, there is no reduction in expansion or grade of blastocyst.

**Conclusion:** Sperm DNA fragmentation testing is a useful investigation in unexplained infertility. However, Sperm DNA fragmentation has no significant association with Day 5 embryo grade in ICSI cycles.

Thesis work of Fellowship in Reproductive Medicine student: Dr. Ramya Harish

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## **Research Article                      Published Date:- 2020-10-13**

[Comparison of oocyte maturity rates in recombinant Human Chorionic Gonadotropin \(HCG\) and triptorelin acetate triggers: A prospective randomized study](#)

Luteinizing Hormone (LH) like exposure in the mid cycle for inducing the oocyte maturation is the very crucial step in the success of ICSI treatment. Introduction of LH surge endogenously by GnRH-agonist for ?nal oocyte maturation induction, may be more physiological compared with the administration of HCG. Since GnRH agonist would induce FSH surge also along with LH surge, as happens in natural cycle. However, the effects of giving HCG trigger for inducing only LH surge and giving GnRH agonist trigger for inducing both LH and FSH surge, in patients treated for ICSI with GnRH antagonists need more research. Sub fertile patients planned for ICSI, meeting the requirement of inclusion criteria, were started with recombinant FSH from day 2 of menstrual cycle. GnRH antagonists were started from day 6 of stimulation. FSH dose was adjusted according to the individual response. Trigger was planned when the lead follicle reaches 24 mm. For triggering, 100 patients were randomized to receive Recombinant HCG trigger and Triptorelin acetate trigger. Oocyte retrieval was done 36 hours after Recombinant hCG Trigger and 35 hours after Triptorelin acetate trigger. The oocyte maturity rate was assessed by the number of metaphase II oocytes retrieved.

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## **Case Report                      Published Date:- 2020-10-13**

[Viral meningitis in pregnancy: A case report](#)

Ms X is a 34 year old para 1 woman who presented at 26+5 weeks' gestation with fever, neurological symptoms and history of a viral illness. She was treated empirically for bacterial meningitis and transferred to a tertiary maternity hospital. Cerebrospinal fluid (CSF) polymerase chain reaction (PCR) was positive for enteroviral ribonucleic acid (RNA), confirming viral meningitis. Ms X improved clinically and was discharged after six days. A high index of suspicion is required for diagnosis of meningitis in pregnancy. Thorough history, examination and workup is vital for timely treatment. Prognosis in viral meningitis is excellent with no clear adverse fetal or neonatal outcomes.

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## **Clinical Image                      Published Date:- 2020-09-16**

[Vaginal and endometrial metastasis of primary cutaneous malignant melanoma](#)

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## **Research Article                      Published Date:- 2020-09-08**

[Establishment of a new reference line for 2D transperineal ultrasound in urogynecology](#)

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**Background:** The purpose of this study was to establish a new, reliable and reproducible reference line for assessing bladder neck descent using 2-dimensional transperineal ultrasound. Therefore, we created a novel line, named Symphysis-Levator Line (SLL) and defined it as the connecting line between the hyperechogenic, dorsocaudal edge of the symphysis pubis and the hyperechogenic anterior margin of the puborectalis muscle, posterior to the anorectal junction.

**Methods:** A retrospective study was performed including 111 patients, who underwent a transperineal ultrasound as part of an urogynecological examination in the department of Urogynecology at the University Medical Center of the Johannes Gutenberg University Mainz. We calculated the bladder neck decent using the SLL and compared our results with the measurements assessed using a horizontal line through the infero-posterior margin of the symphysis pubis, as previously described by Dietz (Horizontal Symphysis Line, HSL). In addition, we calculated the intra- and interobserver reliability of the two methods and examined the influence of various patient characteristics on the obtained values.

**Results:** Both methods demonstrated a high intra- and interobserver reliability. Even though the HSL produced slightly higher numerical values for the bladder neck descent, the novel SLL was more precise. Our data support that the 2-point fixation of the SLL on two anatomical structures ensures the stability of the reference plane during the functional changes of the pelvic floor.

**Conclusion:** The Symphysis-Levator Line could be a useful tool for urogynecologists in the future.

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## **Research Article                      Published Date:- 2020-08-31**

[Universal testing for severe acute respiratory syndrome coronavirus 2 upon admission to three labor and delivery units in Santa Clara County, CA](#)

**Objective:** To determine the prevalence of patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in labor and delivery units in one of the epicentres of the West Coast.

**Study Design:** This was a retrospective chart review of patients admitted to labor and delivery from April 15, 2020-May 15, 2020 after implementation of a universal testing policy on Labor and Delivery.

**Results:** The prevalence of patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the admitted labor and delivery population was 2.5%, of whom 87.5% were asymptomatic.

**Conclusion:** We present additional data on the prevalence of asymptomatic SARS-CoV-2 in pregnant patients on the West Coast, which is much lower compared to other locales, possibly as a result of aggressive 'shelter in place' policy. Universal screening is insufficient to detect asymptomatic SARS-CoV-2 and thus rapid, universal testing should be prioritized for labor and delivery units for the protection of patients and staff, and to better allocate appropriate resources.

**Key points:**

1. 2.5% of 320 patients tested positive for SARS-CoV-2.
  2. 87.5% of positive patients were asymptomatic.
  3. Universal testing on labor and delivery is necessary.
  4. 'Shelter-in-place' policies reduced SARS-CoV-2.
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## **Review Article                      Published Date:- 2020-08-31**

[Pregnancy complicated with deficiency of antithrombin: Review of current literature](#)

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Antithrombin deficiency, although the rarest thrombophilia, carries the highest risk of thromboembolism. This risk is increased especially for pregnant women due to physiological coagulation changes in pregnancy. Therefore, in cases of positive personal and/or family history of thromboembolic events as well as recurrent pregnancy loss women should be tested for antithrombin deficiency. Antithrombin deficiency is caused by numerous mutations of serpin peptidase inhibitor clade C 1 gene (SERPINC) and is classified according to antithrombin plasma activity and antigen levels into Type I (quantitative defect) and Type II (qualitative defect). Complications during pregnancy can be divided into those regarding the mother and those concerning the fetus. The main clinical manifestation of antithrombin deficiency regarding the mother is thromboembolism occurring spontaneously or recurrently during pregnancy. Numerous major gestational complications such as miscarriage, intrauterine growth restriction or fetal death, placental abruption, preeclampsia and hemolysis, elevated liver enzymes, low platelets (HELLP) syndrome can be linked to antithrombin deficiency. Close monitoring with early and adequate prophylaxis and treatment nowadays can mostly assure the positive pregnancy outcome for both mother and child. Prophylaxis/therapy with both low molecular weight heparin and antithrombin concentrate should start as soon as pregnancy is planned or at least as early as possible in pregnancy and continue until the end of the puerperium.

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## Research Article

Published Date:- 2020-08-14

### [The influence of HBV or HCV infections on the pregnancy course](#)

The incidence of HBV infections among the pregnant in Europe falls within the range of 1% - 7%, whereas it is 1.7% - 4.3% for HCV.

The aim was to assess the course of pregnancy among women infected with HBV or HCV, and the condition of neonates in the fifth minute after the birth.

The study included 157 pregnant individuals infected with HBV, 53 infected with HCV, and 330 healthy pregnant women. None of the women infected with HBV and HCV as well as from the control group were infected with HIV, and none of them took intoxicants.

Weight of neonates delivered by healthy women was higher as compared with children born by women infected with HBV or HCV (3,517 vs. 3,347 and 3,366). The Apgar score of neonates delivered by women with HBV and HCV infections was lower as compared with the children born by healthy women (9.4 vs. 9.3 vs. 9.7;  $p < 0.05$ ). Premature births occurred more often in HBV and HCV-infected women than in the control group (14.6% and 24.5% vs. 6.96%;  $p < 0.05$ ). Miscarriages were significantly more common among the pregnant with HCV infections as compared with the pregnant who were healthy (9.4% vs. 1.8%;  $p < 0.05$ ). In comparison with the healthy individuals, this group of patients experienced pruritus (10.5% vs. 4.2%;  $p < 0.05$ ), oedemas (9.4% vs. 2.4%;  $p < 0.05$ ), and hypertension (9.4% vs. 1.5%;  $p < 0.05$ ) more often.

An increase in HBV loads was observed between the 6th and 28th – 32nd week of pregnancy among the infected with HBV, and then, a decrease was observed in the 6th months after the delivery.

The pregnant infected with HBV without HBsAg (-) and the infected with HCV are subject to common incidence of premature births. Women infected with HCV often experience oedemas, hypertension, and pruritus.

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## Review Article

Published Date:- 2020-08-12

### [Endometriosis as a risk factor for colorectal cancer](#)

Endometriosis is a common benign disease in women of reproductive age, it has been associated with an increased risk of various malignancies that is defined by certain histological criteria mainly 80% in ovary and 20% in extragonadal sites such as intestine, rectovaginal septum, abdominal wall, pleura and others; the greatest risk for colorectal cancer is women with adenomyosis or endometriosis; Several genetic alterations have been found in the risk of endometriosis associated with cancer; The symptomatology, imaging and endoscopic characteristics simulate other inflammatory and malignant lesions that make the preoperative diagnosis of extragonadal endometriosis difficult. This is a review of the knowledge about endometriosis and its potential risk of malignancy, particularly with colorectal cancer

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[A case series review of patients with Thrombocytopenia and Absent-Radii syndrome \(TARS\) and their management during pregnancy](#)

Bleeding diatheses due to platelet-related disorders can present challenges to treating clinicians especially in the context of peri- and post-partum patients in the obstetric setting. TARS is an inherited disorder characterised by reduced bone marrow platelet production, skeletal deformities affecting radii and other limbs; cardiac, renal, and other heterogeneous anomalies may occur. It is caused by co-inheritance of a microdeletion and a nucleotide polymorphism in the RBM8A gene on chromosome 1.

Bleeding phenotype is more severe than platelet numbers might predict especially in infants but improves with age. There is minimal literature regarding impact in pregnancy and puerperium.

We describe management of three pregnancies in the haematology-obstetrics clinic. As platelet counts normally decrease through pregnancy, close monitoring is required in TAR syndrome. No major bleeding was seen antenatally but two required platelet transfusion during labour. No other treatment definitely improves bleeding, although case reports of steroids claim variable success.

Tranexamic acid may be helpful, and thrombopoietin agonists represent a potential future option.

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[Hemorrhagic shock due to irreducible uterine torsion in a third trimester twin pregnancy: A case report](#)

Uterine torsion is a rare life-threatening event that happens at any age or any gestational age. By definition, it consists of a rotation of more than 45 degrees around the long axis of the uterus. The reported cases have variable presentations. The uterine torsion can happen without any sequelae either for the fetus or the mother. However, fetal and maternal mortalities were also reported in such a case.

We hereby, report the case of a 29-year-old female patient, with previous four Normal Vaginal Deliveries, pregnant with twins, presenting at 36 weeks gestation with an irreducible uterine torsion at the third trimester of her pregnancy complicated by maternal and fetal deaths.

We concluded that the prognosis is improved as long as the management is done rapidly. More data is needed to know about the genetic predilection and the characteristics of imaging workup for a rapid preoperative diagnosis of this condition.

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[Curettage is a risk factor for marginal umbilical cord insertion](#)

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**Objective:** To identify the risk factors for marginal cord insertion (MCI).

**Material and Methods:** This case-control study was carried out between 1st February and 30th June 2019. Singletons with and without MCI at delivery were recruited. Main variables analyzed included maternal age, parity, number of previous dilatation and curettage (D&C) or manual vacuum aspiration (MVA), time interval between each procedure and conception, cord insertion. Fisher's exact test, t-test and logistic regression were used to compare data from both groups.

**Results:** We found 60 cases of MCI (4.1%). The significant ( $p < 0.05$ ) risk factors for MCI were past-history of D&C (aOR 5.97, 95% CI 1.95-18.25) particularly when conception occurred  $\geq$  5 months after D&C (OR 10.5, 95% CI 1.36-81.05), fetal female sex (aOR 3.82, 95% CI 1.41-10.32), parity  $\geq$  4 (aOR 2.63, 95% CI 1.05-12.71) and past-history of MVA (aOR 2.06, 95% CI 1.23-8.76).

**Conclusion:** Women should be advised to conceive at least five months after D&C.

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**Editorial**

**Published Date:- 2020-07-02**

### [Uterine Fibroid Embolization in time of Covid-19](#)

The coronavirus pandemic has caused major changes in society around the world, especially in healthcare systems. Patients with various medical ailments and conditions who were scheduled to undergo elective treatments before the pandemic arrived, wonder now if they still should follow through with it.

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