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RESEARCH ARTICLE

A RARE CASE OF PUERPERAL UTERINE INVERSION AND LITERATURE REVIEW

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Abstract

Puerperal inversion of the uterus is a rare and serious obstetrical complication of delivery. It consists of a displacement of the uterine fundus during delivery. It is a therapeutic emergency and requires multidisciplinary management by trained resuscitators and obstetricians. We report the case of a patient admitted in our structure after a non-medical delivery. She was hospitalized in our structure and benefited from a conservative treatment. The literature remains poor and similar cases are rare.

Introduction:-

Puerperal inversion of the uterus is a relatively rare, but serious, obstetric complication in which the corpus of the uterus is forced completely or partially through the uterine cervix. It is defined as an invagination of the uterine fundus in the shape of a "finger glove".[1]

Complete uterin inversion may be a devastating process resulting in hemodynamic shock. If untreated or not managed properly it can lead to maternal death.

We describe a case report of puerperal uterine inversion .

Case report :

we report a case of a 26 years old patient, 2nd gesture 2nd pare, without notable pathological antecedents, admitted to the emergency service of maternity for serious haemorrhage of the post partum to 12 hour of a delivery by low way not medicalized home. During this delivery the parturiente presented of the acute expulsive pelvic pain with protrusion of a mass through the vulva.

The general examination on admission found a patient in fairly good general condition, conscious, hemodynamically unstable with an arterial pressure of 80/40 mmgh, heart rate of 120 beats/min, respiratory rate of 24 cycles/min, discolored conjunctivas, urine dipstick was negative.

The obstetrical examination revealed the presence of a mass externalized by the vulva of a roughly oval shape, soft and reddish, bleeding without placenta, and the identification of the uterine fundus by pelvic touching was impossible.

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All these elements made us suspect the diagnosis of stage III uterine inversion (figure 1). A biological workup was requested and the following results were found.

hemoglobin: 6.2 g/dl platelet: 184000 el/mm3 prothrombin rate: 63%.

Following the clinico-biological data, the patient was put in condition and sent to the operating room where resuscitation measures were carried out, based on a transfusion of macromolecules, 3 red blood cells, 5 fresh frozen plasma.

We then proceeded to the reintegration of the mass at vaginal level which took the shape of the uterus by the Johnson maneuver. This last one was carried out with suction without immediate complication. an endo-uterine revision, a uterine massage and an oxytocic infusion were carried out thereafter. The overall evolution was satisfactory with cessation of bleeding and clinical and biological improvement. The patient had a surgical exploration of a good uterine globe without uterine rupture

Discussion:-

Puerperal uterine inversion is due to displacement of the fundus of the uterus, usually occurring during the third stage of labour. It is classifed as complete if the fundus passes through the cervix, or incomplete if it remains above this level.

A classification of uterine inversions has been described [3]:
1st degree: uterine inversion is intrauterine or incomplete. The fundus remains in the cavity.
2nd degree: complete inversion of the uterine fundus through the cervix.
3rd degree: complete inversion of the uterine fundus which is externalized through the vulva.
4 th degree: participation of the vaginal walls in the turning over.

Our patient presented an inversion of the 3rd degree inversion.

Several risk factors for uterine inversion, such as placenta accreta, a short umbilical cord, augmentation, excessive extension of the uterine muscle, rough procedures (e.g., the Crede maneuver, excessive cord traction and manual removal of the placenta without sign of placenta separation and well contraction of the uterus) for placental removal, have been previously reported [4]

The classical presentation is of an obviously displaced uterus while delivering the placenta, usually in association with post-partum hemorrhage and clinical shock (hypotension and inadequate tissue perfusion), out of proportion to the blood loss , every caregiver in the delivery room is required to look for this rare condition. A delay in the diagnosis of uterine inversion might result in critical bleeding and severe maternal hemorrhagic shock.

Management of uterine inversion has two important components: the immediate treatment of the haemorrhagic shock and replacement of the uterus. Resuscitation should start immediately while attempts are made to replace the uterus manually. The chance of immediate reduction is between 22 and 43% [5,6,7]. Successful repositioning can be reached by pushing the uterine fundus back through while applying pressure from the outside with the other hand (Johnson's maneuver). The internal hand should remain until the uterus is contracted (sometimes reached after administering oxytocic agents) so that the risk of recurrence is as low as possible. The O'Sullivan hydraulic method, which consists of filling the vagina with two liters of hot saline at 50°C for 5 minutes, allows reinversion of the uterus. It can be proposed in case of failure of manual reduction. All of these reduction methods are performed with the placenta in place, unless the placenta is a hindrance to repositioning the uterus. After manual reduction, an endo-uterine revision is performed and oxytocics are used to avoid immediate recurrence [8].

Laparotomy is not needed for successful repositioning. All these procedures should be performed under general anesthesia in the operation room [9].

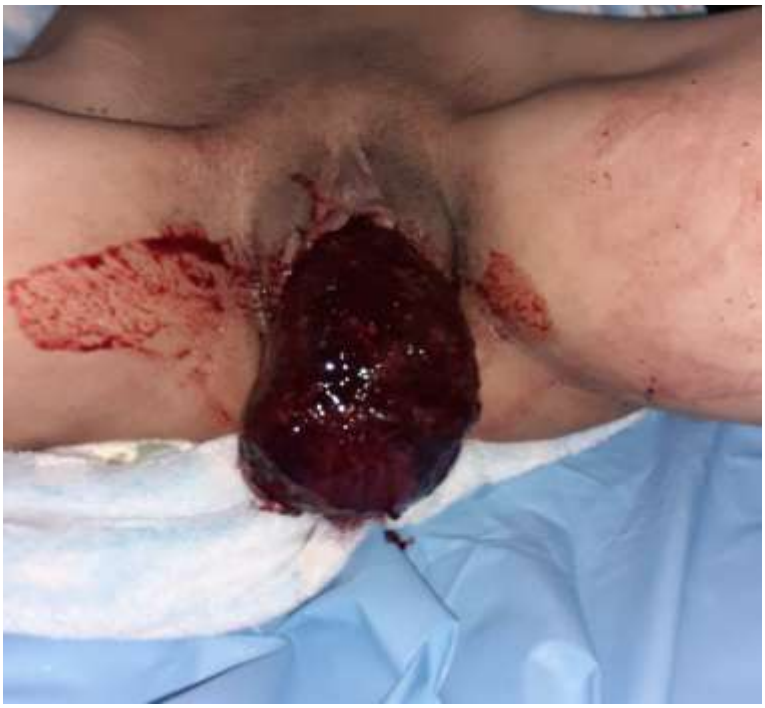

Figure 1:- Photo taken on admission of our patient: complete uterine inversion.

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