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RESEARCH ARTICLE

RECURRENT HEMATOCOLPOS DUE TO ISOLATED ATRESIA OF THE LOWER THIRD OF THE VAGINA: A CASE REPPORT

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Abstract

Reccurent hematocolpos is a rare condition that can be due to many malformations . One of them is the atresia of the lower third of vagina, wich is due to an anomaly in the development of the terminal part of the Müller's canals.

Case: We report the clinical case of a 15-year-old patient who presented primary amenorrhea associated with cyclic pelvic pain, in whom speculum examination revealed a blind vagina. The after finds the notion of hematocolpos cure with recurrence on 2 occasions. MRI revealed isolated atresia of the lower third of the vagina. The diagnosis of aplasia of the lower third of the vagina on a functional uterus was retained. The patient had a vaginal plasty by vaginal route. The evolution was good with regular cycles and improvement of pelvic pain. The follow-up is one year.

Conclusion: Regardless of the surgical technique used, vaginoplasty allows in this rare condition to restore good life quality and prevent endometriosis.

Introduction:-

Hematocolpos results from a distension due to the accumulation of blood from menstruations and secretions in the uterine or vaginal cavities, it is a rare condition that can hide several urogenital malformations [1]. We report the case of a young girl with reccurent hematocolpos.

Observation:-

This was a 15-year-old patient going through puberty with no pathological history with primary amenorrhea presenting with cyclic pelvic pain related to hematocolpos. The patient received twice a simple cure of hematocolopos with recurrence each time. Clinical examination found abdominal distension of the normal external genitalia and a blind vagina **(Figure 1).**

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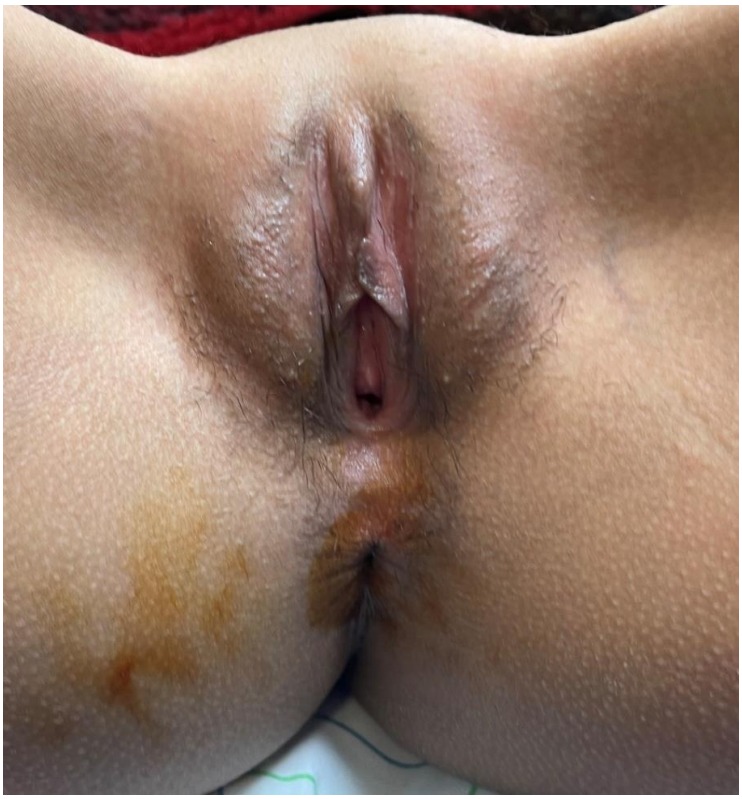

Figure1:- Preoperative examination showing normal external génitalia and blind vagina.

The pelvic ultrasound finds a vaginal atresia of 1.79 cm, the reports of the vaginal atresia with the bladder in front, the rectum behind and the hematocoplos above and an impact on the upper apparatus with hematometry image **(Figure 2)**.

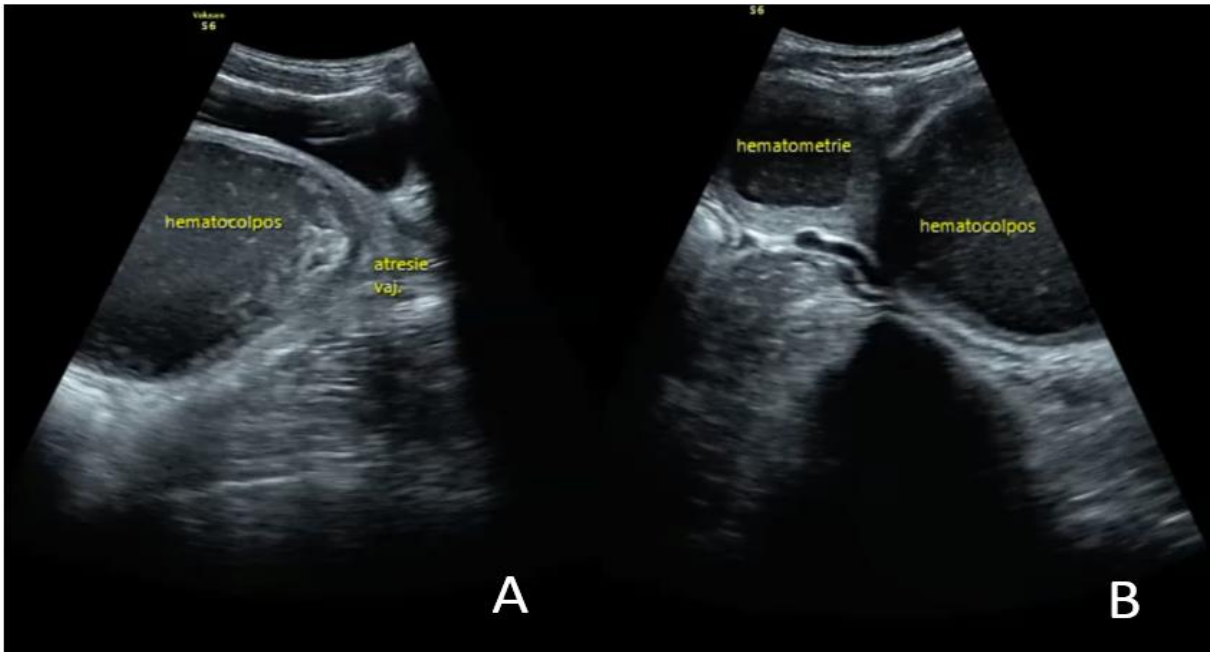

Figure2:- Ultrasound images showing A: reports of vaginal atresia with the bladder in front, the rectum behind and the hematocoplos above, B: repercussions on the upper apparatus with hematometry image.

Pelvic MRI revealed fluid retention in the uterus and vagina, atresia of the lower third of the vagina and a hemorrhagic cyst of the ovary. The diagnosis of haematocolpos by atresia of the lowerthird of the vagina was made **(Figure 3).**

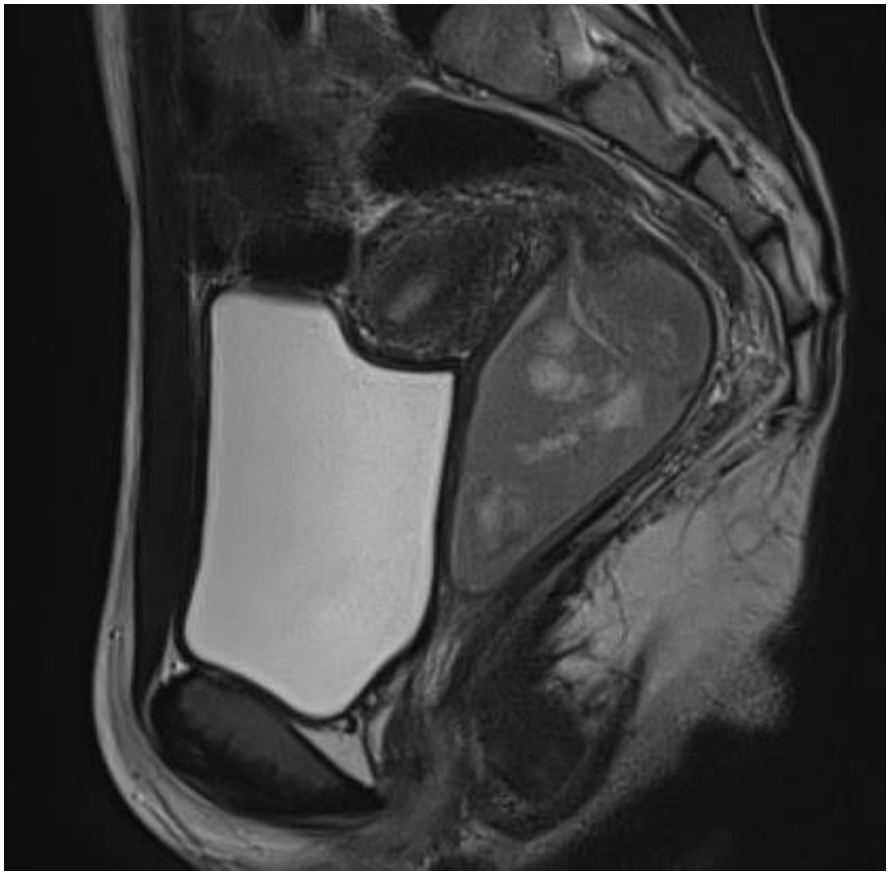

Figure3:- MRI image showing intravaginal collection with agenesis of the lower third of the vagina without any other associated malformations.

Our surgical procedure was performed in the gynecological position, and consisted of a horizontal incision in the central part of the blind vagina, careful detachment of the bladder and rectum **(Figure 4 A)**, identification of the hematocolpos using a needle then its evacuation **(Figure 4 B)**, a digital dilation wascreated over 2 cm, a vaginal plasty had been started by detachment of the vaginal mucosafrom the submucous plane over 2 cm then the suture of the vaginal edges and their mooring on the vulva by dots separated **(Figure 4C)**. a drain was placed to prevent restenosis for one week **(Figure 4D)**

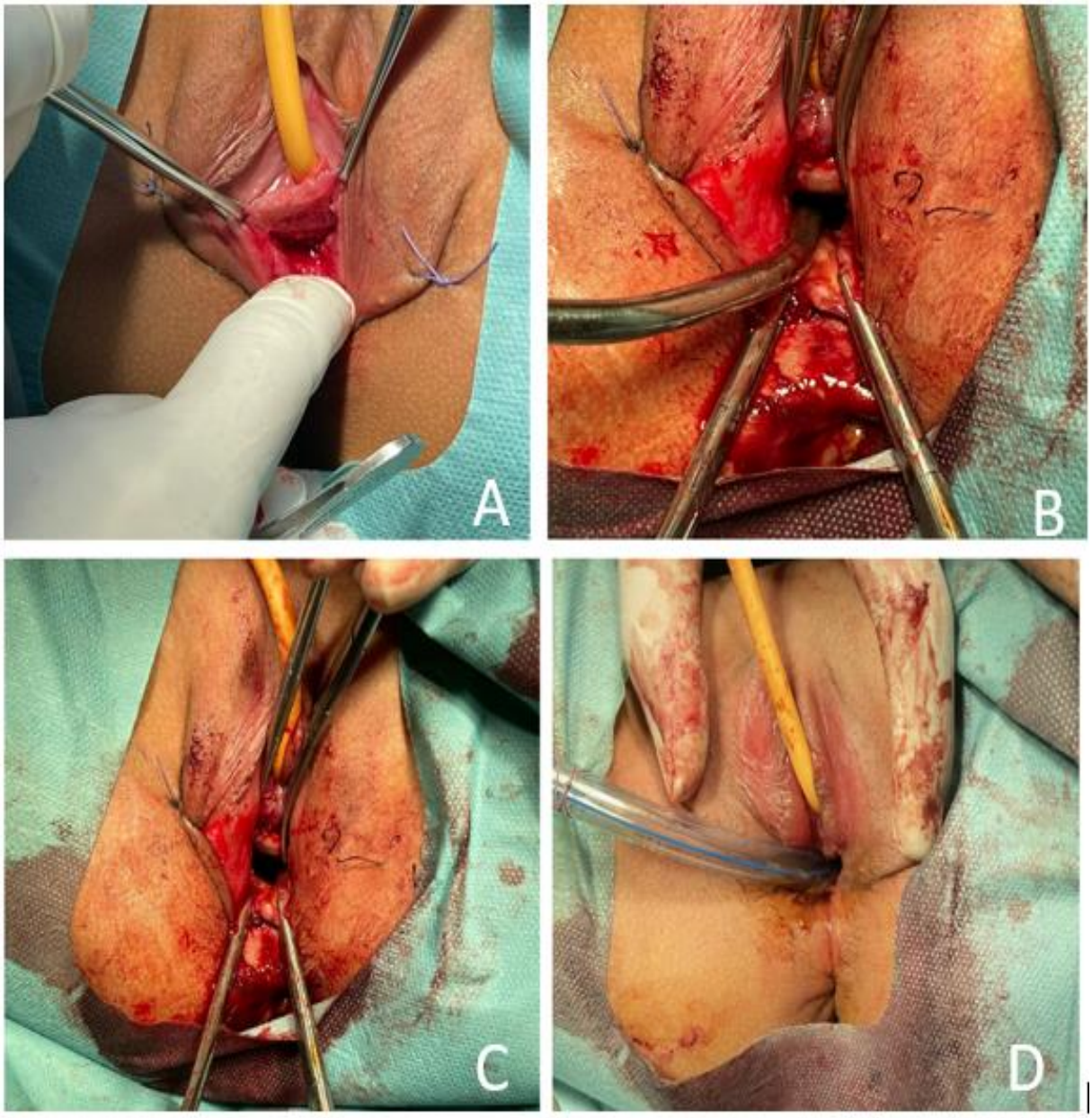

Figure4:- A: horizontal incision of the central part of the blind vagina with detachment of the bladder and rectum B: identification of the haematocolpos using a needle then its evacuation C: a vaginal plasty had been started by suturing the vaginal edges and their mooring on the vulva by points separated D: a drain was put in place to avoid restenosis for a week.

A drain was left in place for 8 days to prevent vaginal stenosis; its position was checked on ultrasound to insur his proper place in vagina **(Figure: 5)**.

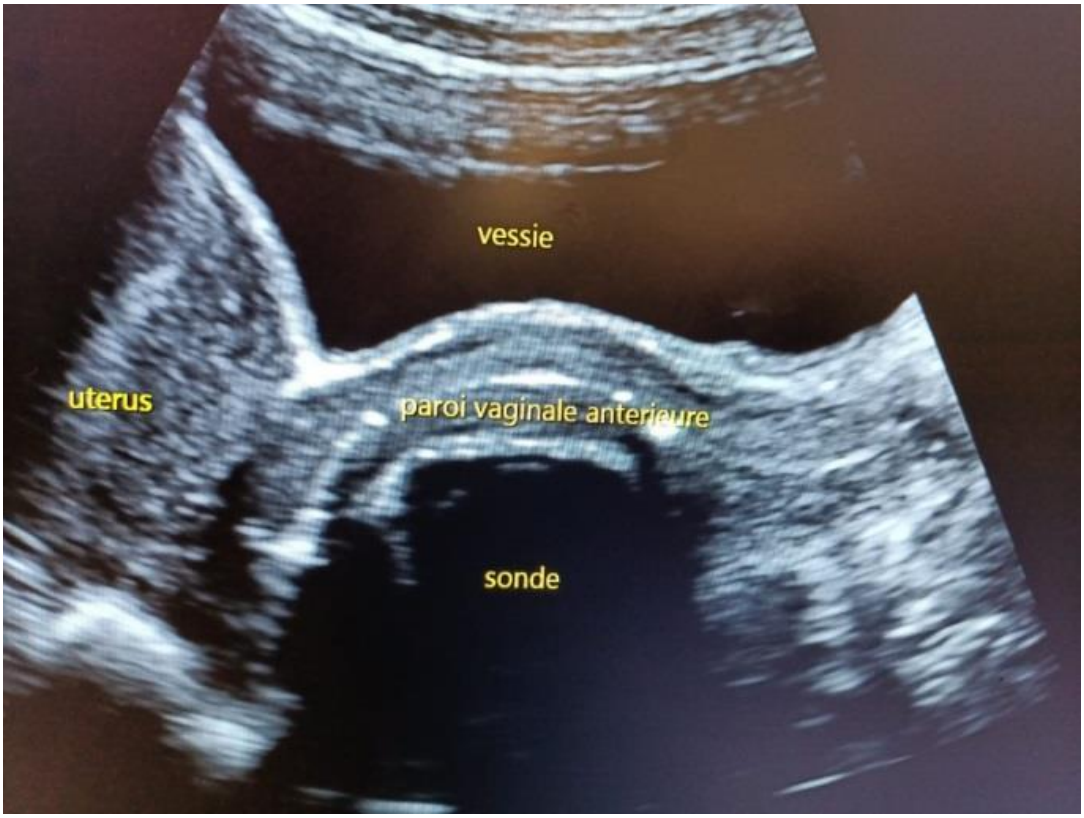

Figure5:- Echographic image showing the drain in place with evacuation of the hematoscopos.

The postoperative course was simple. At the exit, repeated vaginal stretching for 2 months were advised to avoid recurrence. A good evolution by disappearance of pain and appearance of menstruation was observed with a follow-up of one year **(Figure 6)**.

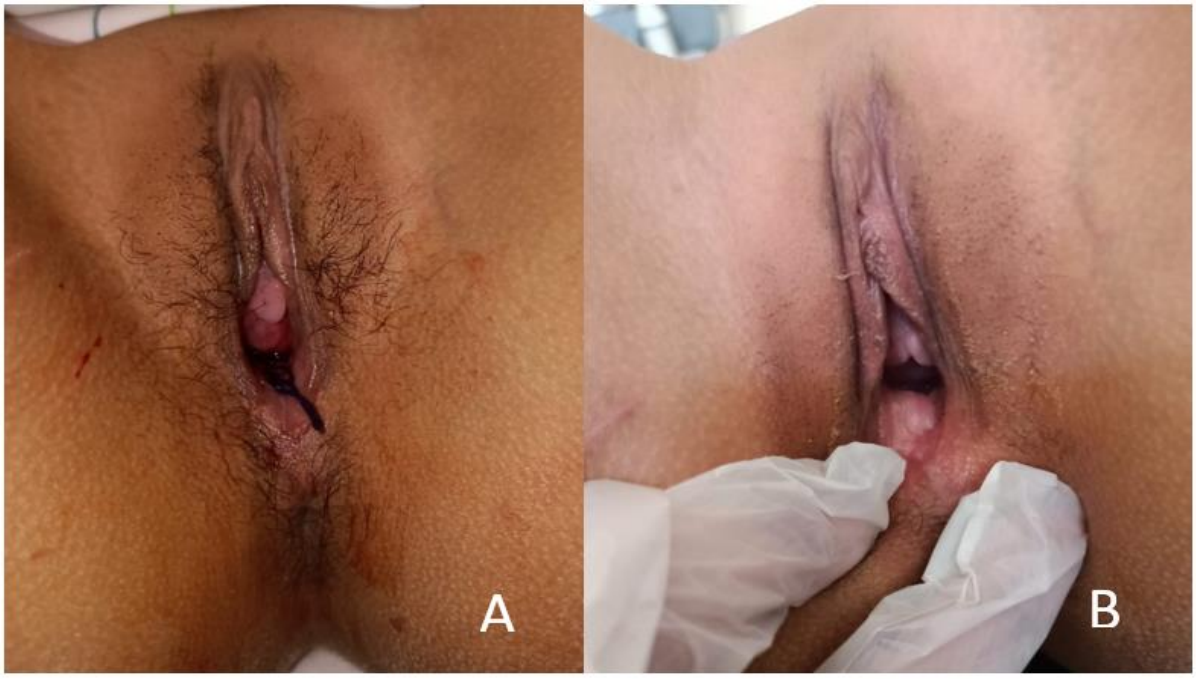

Figure 6:- Images of the postoperativeresultat D 15 (A) and at 1 month (B).

Discussion:-

Cervical and vaginal obstructive malformations such as hymenal imperforation, transverse vaginal septum, uterine or vaginal atresia or aplasiacanbe the etiology of hematocolpos [2]. Isolated vaginal atresia is a rare Müllerian anomaly of the genitalia characterized by the normal development of the uterus, cervix and proximal part of the vagina while the distal part isformed by fibrous tissue, this is the case of our patient, the prevalence of utero-vaginal aplasia usually reported in the literature is 1/4000 to 1/10,000 [3]. Mayer-Rokitansky-Kuster-Hauser syndrom which is a rare congenital condition characterized by the absence of a uterus and at least the upper 2/3 of the vagina.The lowerthird of the human vagina arises mainly from the intermediate mesoderm, which gives rise to the Müllerian ducts, while the upper part of the vagina is formed from the urogenital sinus, which arises from the endoderm [4,5].The vulva, which is the outer part of the female genitalia, is formed by the fusion of the labio scrotal folds, which develop from the genital ridge, a structure that also gives rise to the labia minora and the clitoris [4].

Hematocolpos is revealed at puberty by cyclicpelvic pain and primary amenorrhea. In the face of such symptoms, a meticulous general and gynecological clinical examination must be established as well as a pelvic ultrasound which can show a distention of liquid echogenicity of the vagina of the uterus of the tubes or see an abdominal effusion by progressive accumulation of menstrual blood which can compress bladder and ureters leading to associated urinary symptoms [6]. Ultrasound may not be enough for the diagnosis of small hematocolpos and for the search for other associated urogenital malformations and for this a pelvic MRI will be necessary [7]. Knowledge of associated malformations is essential to guide surgical treatment. The goal of treatment is to drain the hematocolpos, lateral low a normal flow of menstruation, a normal sexual life and avoid complications such as endometriosis provider of pain and infertility. Several techniques are described, a vaginal plasty is the treatment of choice by incision and bladder and rectal dissection and anastomosis of the vaginal mucosa to the perineum as was for our patient [8]. A skin or intestinal graftcanbeused in cases of high atresia. A diagnostic and operative laparoscopy may be indicated in the event of malformations of the uterus, tubes or the associated urinary tract [9]. Close follow-up is important because there is a risk of restenosis, infection, menstrual disorders and micturition or defecation disorders [10].

Conclusion:-

Hematocolpos is a rare condition that should be considered in any patient going through puberty with cyclic pelvic pain and primary amenorrhea. A clinical examination coupled with imaging helps in the diagnosis and guides the treatment. Early management and adequate management with varied surgical techniques preserve fertility and prevent the onset of complications such as endometriosis.

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