

# Case Study: HAEMATOCOLPUS

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## Introduction:

Haematocolpus is a medical condition in which the vagina is pooled with menstrual blood due to the blockage of menstrual blood flow. It is often caused by the presence of an imperforate hymen. It can also occur if there is a transverse vaginal septum.

An imperforate hymen is a medical condition where the female is born with a hymen that spans the entire diameter of the vagina, with no opening to the outside.

A transverse vaginal septum is where an extra wall of tissue has formed during embryological development and creates a blockage in the vagina. It is a congenital Mullerian duct anomaly. Transverse vaginal septae are relatively rare anomalies, occurring in about 1 in 70,000 girls. Often, women might have a normal hymeneal opening, but this wall of tissue might be blocking the access to the vaginal canal.

## Case Report:

A 17 year old female patient was referred by her GP for an Ultrasound scan to investigate primary amenorrhoea because despite starting puberty development several years previously she had not yet had a period.

A transabdominal pelvic ultrasound scan was performed and revealed a markedly distended fluid filled vagina located posterior to the bladder measuring 18 x 10 x 11cm. It was thin walled, tubular in shape and the uterus was only partially visualised. The fluid contained diffuse low-level echoes and extended to the level of the cervical os. Appearances were consistent with a haematocolpus.



Figure 1: Longitudinal view of distended vagina

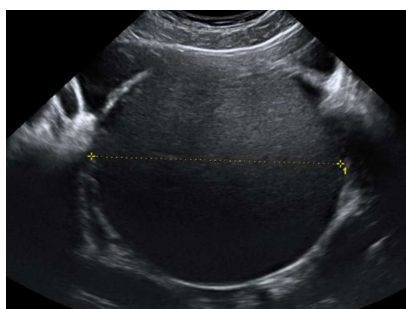


Figure 2: Transverse image of distended vagina indenting the bladder.

An MRI was performed for further assessment.

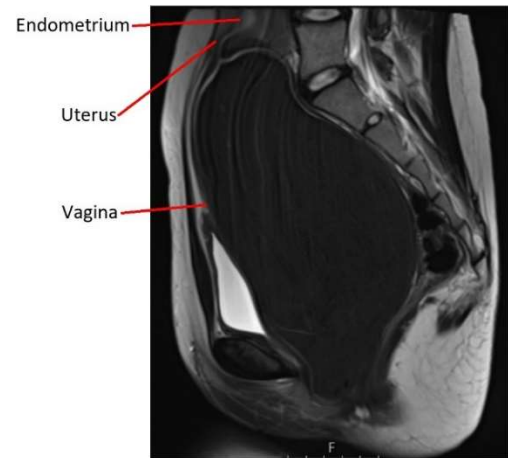


Figure 3: Vagina distended with blood (haematocolpus).

## Management:

Gynaecological examination revealed bulging hymenal remnant. A complete transverse vaginal septum was identified. Surgical resection of the transverse septum was carefully planned.

Under General Anaesthetic the thick, vaginal septum of fibrous tissue was excised and over 1 litre of old blood was drained. Further management with physiotherapy was arranged for vaginal dilation to maintain the vaginal entrance. The patient made a good recovery.

## Discussion:

Obstructions of the vagina are mostly due to congenital Mullerian duct anomalies like an imperforate hymen or transverse vaginal septum. Patients with haematocolpus usually present at puberty due to primary amenorrhoea. If there is involvement of the endometrial cavity or both endometrial and vaginal cavities, it is called haematometra and haematometrocolpos respectively. Haematocolpos though rare should always be on the list of differential diagnoses in adolescent girls with primary amenorrhoea who present with any of the following symptoms: cyclical pain, low back pain, constipation and urinary tract infections. Due to its rarity, it is not always identified on first presentation. A transabdominal ultrasound is an easy non invasive way of making an accurate diagnosis.

## Reference:

Kloss et al; Hematocolpos secondary to imperforate hymen; Int J of Em Med; 3 (4): 481-482

Williams et al; Transverse vaginal septae: management and long-term outcomes; BJOG. 2014;121(13):1653-1658

Miller et al; Surgical correction of vaginal anomalies; Clin. Obstet. Gynecol; 2008;51: 223-236.