cause (4). Literature has shown that there are a number of associated risk factors for haematometra, including, but not limited to: placenta praevia, placenta accreta and percreta, multiple previous caesarean sections, and previous cervical operative procedures (7). Haematometra following a caesarean section may be due to the inappropriate closure of the uterus, due to poor surgical technique, or due to the stitching of the anterior and posterior uterine walls, thus creating a uterine pouch where blood may accumulate over the years, as was the case for our patient (5). Transvaginal sonography is the first imaging modality for the diagnosis of haematometra (8, 9), which, in our case showed a distended endometrial cavity with fluid collection and a stretched myometrium. In order to confirm the diagnosis of haematometra, an MRI may be done in order to assess the uterine anatomy and level of obstruction (9, 10). An MRI may also provide information of any other associated changes, such as haematosalpinx. It allows for a more detailed evaluation of the anatomy in question, without exposing the patient to ionized radiation. In our case, the MRI was invaluable as it showed a massive fluid-filled antero-verted uterus, a poorly defined cervix with a thin, irregular ill-defined cervical canal, which was described as a result of a previous gynaecological intervention. In having a clear, detailed understanding of the patient's anatomy, together with the patient's risk factors in developing haematometra, a holistic and all-encompassing treatment plan may be constructed. The only identifiable risk factors in our case presented, included secondary amenorrhea, and a previous caesarean section coupled with poor surgical technique, which was done at her base district hospital. With increasing rates of caesarean section deliveries occurring on a global scale, there is an equivalent increase in rarer complications occurring such as haematometra (7). In order to reduce the risk of these complications becoming more common, we suggest some secure measures to be taken intra-operatively; It is advisable that after securing the angle of the uterine incision, a Hegar dilator (number 6 or 8) should be inserted through the cervix and then discarded. Once the communication of the uterine cavity, cervical canal, and vagina is confirmed, the uterine closure may then be performed with a single or double layer, respecting the correct approximation of the

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DOI: 10.36205/ trocar3.2022005
Received 7-2022 Accepted 9 - 2022

cut margins (decidua, myometrium, serosa). In doing so, the accidental closure of the cervix may be avoided. Additionally, a thorough examination of the patient at follow-up (including pelvic) should be performed to rule out any iatrogenic complications (3).

Conclusion:

Whilst haematometra is a rare condition, it should always be a differential diagnosis in patients presenting with amenorrhoea and cyclical pain when other common causes are ruled out. The index of suspicion will be raised when there are positive findings on ultrasonography, and the patient has risk factors (for either congenital or acquired haematometra). As in our case, systematic inspection of the vagina should be undertaken following a caesarean section. Haematometra following caesarean delivery, where possible, should be managed similarly to a high / transverse vaginal septum.

References:

1.1 Kaur G, Jain S, Sharma A, Vaid NB. Hematometra formation – a rare complication of caesarean delivery. J Clin Diagn Res. 2014; 8(8):3-4.

DOI: 10.7860/JCDR/2014/8364.4689

2.Chou B, Bohn JA, Mairs R. Acute abdominal pain caused by hematometra in an adolescent female: a case report. J Med Case Rep. 2016; 10(1): 369

DOI: 10.1186/s13256-016-1154-6

3.Gabby LC, McDaniel KE, Gordon BJ, Al-Marayati LA. Hematometrocolpos following low transvers caesarean delivery complicated by uterine dehiscence. Case Rep Obstet Gynecol. 2021; 1-3.

DOI: 10.1155/2021/5591893

4.Tolefac PN, Theophile NN, Tchente CN, Yeika E, Adamo B, Priso EB. Case report of haematometra and cervico-isthmic adhesions following caesarean section in resource-low setting. Clin Res Trials. 2017; 3(5): 1-3.

DOI: 10.15761/CRT.1000191

Corresponding author: dr.m.chrysostomou@gmail.com
DOI: 10.36205/ trocar3.2022005
Received 7-2022 Accepted 9 - 2022

5.Saeed GA. Case of postoperative haematometra in a 40-year-old woman, East Mediterr Health J. 2010; 16(2): 237-239.

6.Noor C, Patankar S, Winter-Roach B. An unusual case of hematometra in a postmenopausal woman associated with Manchester repair. J Low Genit Tract Dis. 2012; 16: 162-164.

7.Basaran OE, Guvendag-Guven ES, Guven S. Haematocervix as an uncommon complication of caesarean delivery: a case report. Gynecol Obstet Reprod Med. 2020; 26(3): 227-228.

8.Scheerer LJ, Bartolucci L. Transvaginal sonography in the evaluation of hematometra. A report of two cases. J Reprod Med. 1996; 41(3):205-206.

9.Nalaboff KM, Pellerito JS, Ban-Levi E. Imaging the endometrium: disease and normal variants. Radiographics. 2001; 21(6): 1409-1424.

DOI: 10.1148/radiographics.21.6.g01nv211409.

10.Cox MG, Gould SW, Podberesky DJ, Epelman M. Magnetic resonance imaging of acquired disorders of the pediatric female pelvis other than neoplasm. Pediatr Radiol. 2016; 46:806-817.

Corresponding author: dr.m.chrysostomou@gmail.com
DOI: 10.36205/ trocar3.2022005
Received 7-2022 Accepted 9 - 2022