Case Report

Can Cervical Leiomyoma be A Cause of Heavy Menstrual Bleeding in Adolescent Girl?

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Abstract

Background: Heavy menstrual bleeding (HMB) in adolescents is a very common problem but the diagnosis is often delayed due to its embarrassing nature, fear of disease and ignorance of the severity of the condition.

Case report: We report a case of young girl presented to Kahuta Research Laboratories (KRL) hospital, Islamabad with heavy menstrual bleeding and severe iron deficiency anaemia. After relevant investigations, blood was transfused. Initially she was managed on tranaxemic acid and Famila-28 but she failed to respond to medical treatment. So, examination under anesthesia (EUA) was done which revealed a fibroid of 3*4cm protruding from cervical os and it was avulsed. Hysterocopic examination showed normal endometrium. Fibroid polyp and curettings were sent for histopathology. Her bleeding was settled after surgery. Histopathology revealed leiomyoma with normal secretory phase endometrium. She took famila-28 for the next 3 months and then stopped taking it. During her follow up for the next 3 months, she had normal menstrual cycle with average blood loss without any medication.

Conclusion: Cervical leimyoma as a cause of HMB in adolescent girls is a very rare event. Due to the cultural boundaries, pelvic examination is avoided in unmarried girls but in cases of HMB which is unresponsive to medical treatment and there is a suspicion of local cause, pelvic examination is mandatory to rule out the local pathology

Keywords: cervical fibroid, menorrhagea, adolescents

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Introduction

Heavy menstrual bleeding (HMB) in adolescents is a very common problem but the diagnosis is often delayed due to its embarrassing nature, fear of disease and ignorance of the severity of the condition. The commonest causes of HMB in adolescents include anovulatory abnormal uterine bleeding due to immaturity of Hypothamic-Pituitory-Ovarian axis (82.3%), coagulation disorders (11.7%) which includes Von Willebrand disease, coagulation factor deficiencies & platelet function disorders and hypothyroidism (5.8%).[1] Rest constitutes Polycystic ovarian syndrome, Cushings syndrome, chronic hepatic or renal failure and medications.[2] The evaluation includes detailed history including history of intake of any anticoagulants, physical examination (including pelvic examination if needed), laboratory investigations for the assessment of anemia & to rule out coagulopathy and pelvic imaging.[3] Management depends upon the underlying cause and the severity of menstrual bleeding.[4]

Cervical leiomyoma as a cause of heay menstrual bleeding has not been well described in literature

because its pathophysiology is unknown. There is only a one case that has ever been reported in literature from India that highlighted that it can be a cause of menorrhagea.

Here we are reporting a similar case of heavy menstrual bleeding in adolescent girl which was not responding to any medical treatment leading to life threatening iron deficiency anaemia necessitating pelvic examination in a unmarried girl. Cervical leiomyoma was the only cause that could be found in that girl and she actually responded well to vaginal myomectomy. This case also highlighted the importance of pelvic examination in sexually inactive girls where there is suspicion of local cause and conservative management has failed.

Case Report

A young girl, 20 years old, single, resident of Azad Kashmir presented to KRL hospital Islamabad on 22nd Jun 2017 with heavy menstrual bleeding since last 3 months.

She had attained menarche at the age of 15 years and had regular cycles with average blood loss since then. 3 months back she developed heavy menstrual bleeding with passage of clots requiring 6-7 heavily soaked pads per day. After 2 weeks of continuous heavy menstrual bleeding she went to local hospital at Azad Kashmir where she was admitted due to hemoglobin of 7 gm/dl. She was transfused 3 RCCs and injectable tranexamic acid was given which settled her bleeding. She was advised oral Tranexamic acid during heavy periods. During her next cycle after 24 days, she again developed heavy menstrual bleeding with passage of clots requiring 6-7 heavily soaked pads/day and it was associated with mild dysmenorrhea. She went to multiple doctors and took oral Tranexamic acid 500mg TDS and Norethisterone 5mg BD but to no avail. So she presented at KRL hospital on 22nd July 2017. She was admitted due to continuous heavy menstrual bleeding since last one month. There was no history of bruising or bleeding from any other body site. She had no personal or family history of bleeding disorders. Systemic inquiry was unremarkable. There was no history of any sexual contact. Her blood pressure (BP) was 90/60mmHg, pulse 108/min, Temp 98'F, R/R 18/min and BMI 17kg/m^2. On general physical examination, she had marked Pallor. There was no Koilonychia, clubbing of nails, hirsutism, facial acne, goitre, lymphadenopathy or petechial spots. Systemic examination was unremarkable. Her laboratory investigations were normal except Hb of 5.5 gm/dl and peripheral film which revealed microcytic hypochromic anemia. Ultrasound showed a rounded hypoechoic area in lower uterine segment with intense vascularity. She was given injectable Tranexamic acid 500gm TDS and oral levonorgestrel 0.15mg with ethinyl estradiol 0.03mg once daily. After hematological consultation, she was transfused 3 RCCs and 2 parenteral doses of iron sucrose were given. Her bleeding settled and she was discharged on 29th Jun, 2017 on same treatment and MRI was suggested. She presented in gynae OPD of KRL hospital on 5th July 2017 with syncopal attacks, dizziness and heavy vaginal bleeding which had developed over night. She was admitted in HDU. Her BP was 90/40mmHg, pulse 120/min, R/R 20/min, temp 98'F with marked pallor. After initial resuscitation, she was given injectable Tranexamic acid 1g stat. Her fresh Hb was 5.8gm/dl & MRI showed multiple intracavity irregular masses likely submucosal leiomyomas or endometrial polyps. After hematological consultation, she was transfused 4 RCCs and 4FFPs. After detailed discussion with patient and family, a plan of examination under anesthesia (EUA) was made and informed consent was taken. On EUA, hymen was already torn.

A fibroid of 3*4cm was protruding from external cervical os. Cervix was dilated and filled up with that fibroid throughout its length. Vaginal myomectomy of that sessile fibroid polyp was done carefully. After vaginal myomectomy, examination of internal os revealed that it was closed confirming its origin from the cervix [figure I].

Her bleeding was settled after surgery and she was discharged on next day in a stable condition. Histopathology revealed leiomyoma with normal secretory phase endometrium. She took oral levonorgestrel 0.15mg with ethinyl estradiol 0.03mg for the next 3 months and then stopped taking it. During her follow up for the next 3 months, she had normal menstrual cycle with average blood loss without any medication.

Figure I: Fibroid polyp

Discussion

Uterine leimyoma is a disease of repr oductive age group and the commonest variants includes intramural followed by subserosal, submucosal and cervical[5]. Cervical leimyoma as a cause of HMB in adolescent girls is a very rare event. Also, it is not well described in published literature making its pathophysiology needs to be determined. There are various diagnostic modalities which can be employed to know the cause of heavy menstrual bleeding like ultrasound and MRI which were advised in our case too. The role of dopplers is controversial because of its low sensitivity and specificity. The definitive diagnosis can only be made by proper examination and histopathology results. Due to the cultural boundries, pelvic examination is avoided in unmarried girls but in cases of HMB which is unresponsive to medical treatment and there is a suspicion of local cause, pelvic examination is mandatory to rule out the local pathology. There is only one similar case reported in the literature by Majumdar A et al which highlighted that cervical leimyoma can cause heavy menstrual bleeding in adolescent girl and the patient responded well to surgery in that case too as conservative measures were not helpful.[6] Moreover, treatment modalities other than surgery like umbilical artery embolization cannot be considered in such cases without having a definitive diagnosis made by histopathology.

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