CASE REPORT

Severe Adolescent Menorrhagia due to Cervical Fibroid

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Abstract

A rare case of severe menorrhagia in a young girl with polycystic ovarian syndrome (PCOS) is presented. On thorough investigations (blood tests and ultrasound) nothing substantial came up, hence ultimately pelvic examination under anesthesia was undertaken, which uncovered a cervical polyp 2.5 × 2.5 × 1.5 cm size, with a intracervical broad base, presenting at the external os but not protruding into the vagina. The growth was electrocauterized at its base, resected and a thorough curettage was done. Histopathology revealed a myomatous polyp and secretory endometrium. Though always a dilemma, in adolescent menorrhagia, a pelvic examination may be life-saving in certain cases, if diagnosis is unclear. The importance of doing a thorough local examination in spite of absent history of sexual activity is highlighted by the following case.

Keywords: Adolescent menorrhagia, polycystic ovarian syndrome, local cervical lesion, myomatous polyp, myoma, polyp.

INTRODUCTION

The initial cycles following menarche are often anovulatory due to dysfunction (delay in positive feedback) of the hypothalamus-pituitary-ovarian axis. The consequent prolonged estrogen secretion results in endometrial proliferation with unstable growth and incomplete shedding which may present as menorrhagia.[1,2] This is the commonest cause of adolescent menorrhagia.[3-5] Apart from anovulation and pregnancy,[6] excessive bleeding during adolescence should also raise the doubt of coagulopathy, since this accounts for the another large subgroup of adolescent menorrhagias.[7,8] The bleeding secondary to blood dyscrasias is usually a heavy flow with regular, cyclic menses. Anovulation and coagulopathy therefore constitute the majority of cases of adolescent menorrhagia (93 to 95%).

The remaining 5 to 7% of cases are due to hypothyroidism,[9] severe renal or hepatic disorders, and local causes which include lesions, tumors, infections, foreign bodies and lacerations of the vulva, vagina and cervix.[2] Sexually transmitted diseases (STD) should also be borne in mind. Neoplastic causes are highly unlikely in this age group.

CASE REPORT

A 17-year old girl, was referred for tertiary care to our center on the midnight of 08 August, 2004 with severe menorrhagia of ten days duration and severe anemia (hemoglobin of 5 gm %). She had been managed with low dose OC pills by a consultant gynecologist elsewhere for the preceding three days, to which she had not responded. One unit of whole blood had already been transfused and the second unit was on flow on arrival to the hospital. She was bleeding heavily using one pad per hour, with passage of clots during each change, associated with dull, colicky pain in the lower abdomen. She had been diagnosed as a case of polycystic ovarian syndrome (PCOS) following menarche, at the age of fourteen years and had received combination pills (estrogen plus progesterone) for regularization of periods off and on. Her periods prior to this episode were regular lasting for six to seven days but were not heavy. There was no history of easy bruisability in either her or her family. There was no history suggestive of pelvic inflammatory disease in the form of fever, lower abdominal pain or excessive vaginal discharge. Patient gave no history of sexual contact. On examination there was gross pallor, no petechial/ purpural spots nor hirsutism, obesity, thyromegaly or lymphadenopathy. Systemic examination was normal. Initial laboratory parameters evaluated at admission included a complete blood count, peripheral blood smear, urine pregnancy test, thyroid profile and blood sugar. These were normal apart from severe normocytic-normochromic anemia. Ultrasound pelvis showed a normal sized uterus with endometrial thickness of 4 mm, a clot in the cervix and polycystic ovaries. Progestogens (norethisterone acetate 10 mg QID) were commenced orally. Additional tests were done the following day, as she continued

to bleed and these included a coagulation profile, hepatic and renal function tests. These too were normal. Following a hematological consultation, she was started on supportive management, with parental antifibrinolytic agents (tranexemic acid 2 gm QID intravenously). Two units of whole blood, two units of fresh frozen plasma and two plasma platelet fractions were infused. On the third day the patient showed features of shock with restlessness, tachycardia (Pulse rate 110 beats/min), hypotension (BP 80/40 mm/Hg) and developed drug induced emesis. She also started passing large clots per vaginum. Repeat ultrasound again showed a doubtful blood clot in the cervix with no other abnormalities. She was taken up for a pelvic examination under anesthesia and found to have a cervical polyp $2.5 \times 2.5 \times 1.5$ cm size, with a intracervical broad base, distending the external os but not protruding into the vagina. This was electrocauterized at its base and sent for histopathology. A gentle but thorough curettage was done, which gave scanty endometrium. The patient showed a dramatic improvement following surgery and was discharged following twenty four hours observation. Histopathology of the polyp and endometrium, revealed a myomatous polyp with secretory endometrium. The patient has been having regular cycles since surgery and is on no medication.

DISCUSSION AND CONCLUSION

Local causes of adolescent menorrhagia are quite uncommon accounting for 5 to 7% of all cases.[2] Consequently in an adolescent girl with no prior history of sexual contact, sociocultural sensitivity often is a factor for not conducting a pelvic examination; however a local cause must be excluded if there is no response to expectant treatment for anovulatory bleeding, pregnancy being excluded and the coagulation profile being normal. Although a cervical polyp would usually be expected to present with irregular bleeding rather than a solitary torrential bleed, the site of origin of cervical polyp in this case was almost as high as the internal os, thus preventing the uterus from contracting effectively. This is a rare presentation of adolescent menorrhagia and we have found no similar case reported in the literature reviewed.

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