# Carvenous hemangioma of the uterine cervix: A case report

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#### ABSTRACT

Carvenous hemangioma of the uterine cervix is a rare clinical condition which has the potential of being life threatening. This rare clinical condition can manifest with patients presenting with abnormal uterine bleeding, menorrhagia with eventual anaemia. The case report here is that of a 27 year old Para o<sup>+o</sup> lady who was admitted to the Accident and Emergency Unit of our hospital with a day history of a huge mass protruding per vagina and a history of significant bleeding per vagina. Packed cell volume was 16% on admission and she had 4 units of blood transfused. She subsequently had examination under anaesthesia and excision of the prolapsed mass done via the vaginal route. Histology of the excised mass was in keeping with cavernous hemangioma of the uterus. Her Postoperative clinical state was satisfactory.

Key words: Carvenous; hemangioma; uterus.

## Introduction

Cavernous hemangioma of the uterine cervix is a rare clinical condition. The patients clinical manifestation can vary from being asymptomatic to having one or more of the following complaint like abdominal pain, abnormal vaginal bleeding, anemia, infertility to maternal and pregnancy-associated complications.<sup>[1-3]</sup> These vascular lesions may arise from angiomatous proliferation in a polypoid endometrial lesion that has persisted over a long period of time.There is also a predilection to disseminated intravascular coagulopathy which is generally presumed to be platelets trapped in the abnormally proliferating endothelium within the hemangioma.<sup>[4]</sup>

The treatment options for hemangiomas remains controversial, while some authors describe conservative treatments such as carbon dioxide laser excision, knife excision, cryotherapy, radiotherapy, electrocauterization, internal artery ligation, uterine artery embolization, local excision, conization, and laser ablation.<sup>[5-7]</sup> However, if hemangiomas are refractory to conservative management,

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hysterectomy may be considered as a last resort even in women of the reproductive age category.<sup>[5]</sup>Radiotherapy has been suggested as a possible treatment but it would affect ovarian function as well.<sup>[5]</sup>

Consequently, it is also very important for pathologists to be aware of the diagnosis of uterine hemangioma, not only because it is rare but the fact that it is life-threatening and may have similar presentation to those of other commoner gynecological conditions. Hence, the need to individualize patients care is very necessary to ensure optimal outcome.<sup>[7]</sup>

The case presented below is unique because the history and clinical findings shows how dramatic these cases

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Received: 19-03-2019 Accepted: 01-04-2020 Published Online: 14-08-2020 could present and if not promptly managed could be life threatening.

## **Case presentation**

Miss AA, a 27 year old Para o<sup>+o</sup> woman was admitted to the Accident and Emergency Unit of our hospital with 12 h history of a huge mass protruding per vaginal and a history of significant bleeding per vaginal. The protrusion occurred following an attempt to bear down while defecating. This was followed by significant bleeding per vaginal associated with passage of blood clots, there was no passage of fleshy materials or vesicles. Her last menstrual period was 2 weeks prior to the period of onset of complaint. She affirmed to a history of constipation and occasional difficulty in micturition prior to this period. There was a history suggestive of deep dyspareunia, no history of weight loss, no history suggestive of her involved in strenuous activities Prior to her presentation in our facility, she had a surgical intervention done 6 months earlier in a private hospital following complaint of the above-mentioned urinary and gastrointestinal symptoms complaints. A diagnosis of an acute abdomen was made following which she had an exploratory laparatomy, the other details of the surgery could not be ascertained. Following this surgery patient defaulted clinic follow-up visit despite the persistence of her initial complaint.

On examination at the time of admission she was apprehensive, pale, not cyanosed, no finger clubbing, and no pedal edema. Her pulse rate was 124 beats per minute and her blood pressure was 90/60 mmHg. The abdomen was flat with a midline infraumbilical hypertrophic scar, it moved with respiration. No areas of undue tenderness, no palpable enlarged organs, and bowel sounds were essentially normal. Vaginal examination revealed a huge mass protruding per vaginal with areas of hemorrhages. Digital rectal examination was essentially normal.

She was immediately resuscitated using intravenous normal saline, blood samples were taken immediately for investigations. Her packed cell volume was 16%, blood was grouped and cross-matched, and transfusion commenced immediately. Urethral catheter was passed to monitor urine output and intranasal oxygen supplementation was administered. The serum electrolytes, urea, and creatinine were essentially normal. The protruding mass was wrapped with sufratule covered with warm saline gauze to reduce the risk of abrasion injury to the mass. She eventually had 4 units of blood transfused over 24 h and 10 ml of Calcium Gluconate was administered. Eventually she had undergone examination under anaesthesia and vaginal myomectomy done. Findings at surgery revealed a large protruding mass measures about 20 by 20 by 16 cm with 3 cm stalk attaching to the cervicouterine junction area, the cervical os was about 4 cm dilated[Figure 1]. The uterus was palpated to be of normal size. The mass was excised at the base of the stalk and the end was suture ligated using vicryl 2 suture. The stump was further coagulated with diathermy, hemostasis was ensured and the vagina was packed with gauze for 6 h following the procedure. The excised mass weighed 2.2 kg and was sent histology.Her postoperative recovery was satisfactory and she was discharged on the third postoperative day. The report of the histopathology indicated that a 2.3 kg hemorrhagic grey mass, which measured  $20 \times 18 \times 13$  cm in dimension, the consistency of the specimen varied between soft to firm. The cut surface was highly hemorrhagic and gray. On histology, the sections showed numerous small to large sized poorly formed vascular channels containing red blood cells, the vessels are connected. There was mild infiltration by neutrophils and lymphocytes [Figure 2]. A diagnosis of cavernous hemangioma was made.

## Discussion

Cavernous hemangioma of the uterine cervix as presented in the case above can cause some confusion in clinical diagnosis due to its rarity and notable differential diagnosis can include Cervical fibroid, endometrial polyp, prolapsed submucous fibroid, nonpuerperal uterine inversion.<sup>[8]</sup> In case where there is a prolapsed fibroid vaginally, the treatment modality is vaginal myomectomy with or without hysteroscopy.<sup>[9]</sup> It has been postulated that these prolapse per vagina may occur due to uterine contractions which may make the fibroid mass protrude through the cervix.<sup>[9]</sup>

Carvenous hemangioma of the uterine cervix mayalso present as a cervical mass.<sup>[10,11]</sup> Like hemangiomas, vascular dilatation can also be found in other benign lesions, such



Figure 1: Patient on the operation table prior to excision



Figure 2: X40 Section shows numerous small to large size congested vascular channels that connect in areas. The stroma is reduced

as adenomatoid tumor, lymphangioma, and arteriovenous malformation. The term hemangioma defines a benign, nonreactive process with increased numbers of normal or abnormally appearing vessels, indicating that many of these lesions represent tissue malformations rather than true tumors. Histologically, uterine hemangioma shows a picture of irregularly shaped cavernous vascular spaces infiltrating between the myometrial fascicles. The large vascular spaces are walled by flat endothelial cells and distended by blood. No centrally placed larger vessels or cell atypia is seen.

Typically, there is no particular age predilection but cavernous hemangioma of the uterine cervix occurs between the second and third decade of life. This was similar to what was obtained in the case presented here.<sup>[5,12]</sup>

The sudden nature of the clinical presentation prompted the need for a quick surgical intervention after prompt resuscitation. In the immediate postoperative period her symptoms were relieved and the anemia was corrected by blood transfusion. It is important to have a suspicion of a malignant change considering the history of presenting complaint in this particular case but that fear was allayed by the report of the histology which was suggestive of cavernous hemangioma of the uterus.

The modality of management adopted in the case presented was a combination of local excision and electrocautery. This modality was adopted not to compromise the tissue integrity of the tissue specimen to be sent for histology by local excision and electrocautery to secure hemostasis.<sup>[5-7]</sup>

## Conclusion

Nevertheless, despite the rarity of cavernous hemangioma of the uterus, a high index of suspicion especially on the part of the gynecologist and the pathologist is very important in making diagnosis of cavernous hemangioma of the uterine cervix.

## **Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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#### **Conflicts of interest**

There are no conflicts of interest.

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