Case Study: Cervical polyp: an unusual presentation of carcinosarcoma

Introduction

Cervical carcinosarcomas are rare neoplasms of the female genital tract. Approximately 35 cases have been reported previously. The other name for carcinosarcoma is a malignant mixed mullerian tumour. Usually, this occurs in the uterus, but it can also appear in the ovaries or the cervix. Cervical primaries are extremely rare, and typically occur in postmenopausal women presenting with a polypoid or pedunculated cervical mass. We present this rare entity for gynaecologists to consider, namely the diagnosis of carcinosarcoma in a cervical mass in a postmenopausal woman.

Case study

A 62-year-old woman presented with a mass that had been protruding through her introitus for last four months. The mass was rapidly increasing in size, from which there was intermittent bleeding. Her general and abdominal examinations were within normal limits. On vaginal examination, a mass of around 4 x 2 x 2 cm was seen at the introitus. The surface was hemorrhagic and smooth. Speculum examination revealed the cervix and vagina to be otherwise normal. The uterus was small and retroverted, and both fornices were normal. Rectal mucosa was normal, and no abnormality was detected in the pouch of Douglas. A provisional diagnosis of endocervical polyp was made. A transvaginal sonography showed a lemon-size polypoid lesion extending from the endocervix. The ectocervix appeared normal.

Macroscopic examination of the received specimen revealed an elongated, brownish polypoid structure, measuring 4 x 2 x 1.5 cm (Figure 1). The cut surface was solid, firm, and greyish-white with foci of necrosis. Microsections showed neoplastic glands lined by pleomorphic epithelial cells with hyperchromatic nuclei (Figure 2). These glands were present among malignant stroma, comprising spindle cells arranged in fascicles resembling leiomyosarcoma (Figure 3). Immunostaining revealed desmin positivity. Thus, the stromal component was confirmed as leiomyosarcoma (Figure 4). Because of the biphasic character of the tumour tissue, and the malignant nature of both the epithelial and mesenchymal components, a diagnosis of carcinosarcoma, or mixed mullerian tumour of the cervix, was made.

Figure 1: Cross-section of the specimen, a brownish polypoid structure measuring 4 x 2 x 1.5 cm

The patient underwent total hysterectomy, with bilateral salpingo-oophorectomy and pelvic lymphadenectomy. Chemoradiation was not given, as the patient declined further treatment. The patient was followed up for one year, and is healthy and living a normal life.
Primary cervical carcinosarcomas are rare neoplasms. Typically, they occur in postmenopausal women who are older than 60 years. On presentation, the most common symptoms are vaginal bleeding or spotting, and rarely, asymptomatic cases may be detected by cervical smear. Unlike uterine carcinosarcoma, the cervical counterpart is associated with human papillomavirus (HPV) type 16 infection. Grayson et al found HPV deoxyribonucleic acid (DNA) in all eight cases of cervical carcinosarcomas, and HPV 16 in three cases. Typically, tumours are polypoid or pedunculated, and sizes range from 1-10 cm in the largest series. This tumour comprises malignant epithelial and mesenchymal component. A tumour containing both malignant epithelial and stromal component was first described by Wagner in 1854. The invasive epithelial component may be composed of squamous cell carcinoma, adenocarcinoma, adenosquamous carcinoma, adenoid basal carcinoma, and adenoid cystic carcinoma. The mesenchymal component may be homologous (fibrosarcoma, endometrial stromal sarcoma, or high-grade spindle cell sarcoma), or heterologous (rhabdomyosarcoma or chondrosarcoma). In the present case, it was a case of adenocarcinoma, which is by far the most common epithelial element, along with leiomyosarcoma.

Carcinosarcomas can be differentiated from adenosarcomas due to the presence of benign glandular component in the latter. They are also easily distinguished from teratomas by their occurrence in an older age group, and by the absence of skin appendages, glia, and thyroid and other tissue.

Total abdominal hysterectomy with bilateral salpingo-oophorectomy and pelvic lymphadenopathy is the treatment of choice. The prognosis of malignant mixed mullerian tumours is universally poor ranging from 12-20% five-year survival. It has also been stated that tumours with heterologous elements are associated with a poorer prognosis than those that are homologous.

To conclude, carcinosarcoma of uterine cervix can present as a cervical polyoid mass.

References