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# Malignant Mixed Mullerian Tumours (Carcinosarcoma of Uterine Cervix) (MMMT): Case Report and Review of Literature

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### **Abstract**

Carcinosarcoma of the uterine cervix are very rare malignancy of the female reproductive tract with poor prognosis. Only fifty cases have been reported in literature until 2013. We report a 49 years old Para 7 + 3 presenting with vaginal bleeding, offensive discharge with intermittent abdominal pain. On examination an impression of a cervical polyp was made. She had total abdominal hysterectomy and bilateral salpingoophorectomy. The histological diagnosis of carcinosarcoma of the uterine cervix was made. She had chemoradiation therapy as adjuvant therapy in view of the diagnosis. Although cancer of the cervix is the second commonest cancer worldwide and the leading cause of cancer death in women, this particular histological variant is very rare, as such no standard protocol of management developed for it yet and it carries a very poor prognosis.

## **Keywords**

Carcinosarcoma, Cervix Uterine, Rare, Malignancy, Prognosis

#### 1. Introduction

Carcinosarcoma of the uterine cervix is a very rare variant of cancer of the cervix [1] [2] [3] [4].

Carcinoma of the cervix is a scourge and remains a scourge in the developing nation of the world of which Nigeria is not an exemption [5]. Cancer of the uterine cervix accounts more than 70 percent of all gynaecological cancers in

Northern Nigeria [6] and by year 2050 we will have about a million new cases of cervical cancer worldwide every year, in that case the current rate would have been doubled [7]. There are various histological variants of cancer of the cervix of which carcinosarcoma of the uterine cervix is one of the rarest. There is no racier, environmental nor infective factor attributable to this variant different from the aetio-pathogenesis of cervical cancer.

This report is to bring to our attention of the presentation, management, possible outcome and prognosis of this variant of cancer of the cervix as evidenced in this patient and in the literature.

Secondly the need to activate or reactivate our screening process and imbibe the use of the human papilloma virus vaccine in our community.

Our screening uptake is 4.8% which is far less than desired, even among the health care providers in the developing nations such as Nigeria [8].

Carcinoma of the cervix has satisfied the entire requirement for screening; as such no woman should be seen coming down with this disease. Prevention is better and cheaper than cure, if there is a cure [8].

# 2. Case Report

We report a 49 years old Para 7 + 3, 4 alive whose last child birth was 14 years prior to presentation. She presented with irregular vaginal bleeding with clots, intermittent lower abdominal pains and mal-odorous watery vaginal discharge all of five weeks duration.

Coitachy was at 20 years, she had used combine oral contraceptive pills for 5 years before changing to intra uterine device. She has never heard of pap smear.

She was the only wife of a business man; she neither smokes nor ingests alcohol.

On examination, she was pale clinically, no pedal oedema.

Her vital signs were all within normal limits.

The abdomen was flat moves with respiration and no palpable abdominal or pelvic mass.

The pelvic examination revealed normal vulva and vagina with mal-odorous vaginal discharge. There was a polypoidal growth on the anterior lip of the cervix measuring 8 cm by 6 cm. There was no contact bleeding.

Rectal examination was normal.

An impression of a cervical polyp was made.

She was counselled and worked up for total abdominal hysterectomy (TAH) and bilateral salpingoophorectomy (BSO) on account of cervical polyp in a perimenopausal woman.

She consented and had TAH with BSO.

All her base line investigations before and after the surgery were essentially normal except for the histology report.

The human papilloma virus status and immunochemistry were very important but could not be done in our centre. The ultrasound scan revealed a huge lobulated hypo-echoic mass in the cervix measuring 5.7 by 7.3 cm in dimension. The endometrium was free.

Histology revealed—malignant mullerian tumour of the uteri cervix (carcinosarcoma). Sections from the cervix show a tumour growing in tubular pattern, nest, sheets and singles. It composed of both epithelia and mesenchymal cells having round to oval to spindle vesicular nuclei, some with prominent nucleoli and moderate amount of cytoplasm. This signifies that it is a homologous type.

In view of the afore mentioned she had chemoradiation therapy.

She had adjuvant chemotherapy with cisplatin based combination and brachytherapy using caesium 137 vaginal cylinder to vaginal vault 1 cm from the surface. She had 20 G of caesium. She has since done well.

She is currently on follow up visits.

# 3. Carcinosarcoma of the Uterine Cervix

Carcinosarcoma of the cervix is also known as malignant mixed Mullerian tumours (MMMT). This histological variant of cervical cancer is rare [1] and accounts for 0.005 percent of all cervical cancers with only about fifty cases documented in literature as at 2013 [2]. The association with human papilloma virus (HPV) has been proven [1] [2]. As a result of the rarity of the disease no standard protocol of treatment and prognosis yet. The commonest presenting symptoms is vaginal bleeding with a cervical mass protruding into the vaginal as we have in this patient and other publications in literature [3] [4]. The cervical tumours/mass ranges from 1.1 to 10 cm grossly on pathological assessment [3] but in our own case it was 7.3 cm.

Microscopically, the documented epithelial components of cervical MMMT are squamous cell carcinoma (SqCC), adenoid basal carcinoma, adenoid cystic carcinoma, adenocarcinoma, serous adenocarcinoma, and poorly differentiated carcinoma. This is at variant with the uterine component that is usually an adenocarcinoma, while that of the cervix is a squamous cell carcinoma.

The HPV gene type 16 is the usual association in MMMT but very few studies have documented serotype gene 18. Unfortunately we have not been able to identify HPV gene in our environment as we are limited with facilities to do so [2] [3].

To date, no standard consensus on guidelines for the management of carcinosarcomas has been established. The optimal treatment remains uncertain basically because the histogenesis is still controversial [9].

Cervical MMMT are managed with combination therapy using surgery, radiotherapy and/or chemotherapy. Cisplatin based chemotherapy has been very rewarding and they are sometimes used as a neoadjuvant therapy in advance cases that are not amenable to surgery, to down stage it.

Surgery still remains the primary treatment of this disease entity; however the role of adjuvant chemoradiation therapy cannot be under estimated. Studies have shown that surgery along with adjuvant therapy gives a disease specific

survival of 31 months [9].

The patient under review had Total abdominal hysterectomy with bilateral sapingoophorectomy with adjuvant chemoradiation therapy. She has since done well on follow up for eight months.

The prognosis of carconosarcoma of the cervix is not conclusive because only few cases have been managed so far for which no conclusive report could be drawn yet, but evidences so far suggest that the earlier the presentation the better the prognosis, as extrauterine spread is associated with very poor prognosis [1] [2] [3] [9] [10]. Five year survival rate according to FIGO is as follows stages I/II are between 30% - 46% while III/IV are 0% - 10% [11].

The point still remains that we need to pick up this disease early by doing compulsory screening. This method of compulsory screening can be built in to our National health insurance scheme (NHIS) as a prerequisite for NHIS registration. Diagnosing at Pre-invasive stage of the disease is the best approach to the management of cervical cancers, as invasive stages are associated with poor prognosis and the cost of care are far beyond the reach of an average Nigerian who earns less than a dollar per day.

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