

Case study

CASE REPORT ON CERVICAL DYSPLASIAS

Abstract

Introduction: - Cervical dysplasia also known as Cervical Intraepithelial Neoplasia (CIN) is a precancerous disorder in which abnormal cell growth occurs on the cervix's surface lining or endocervical canal, which connects the uterus and the vaginal canal. **Clinical findings:-** Abdominal pain , weight loss, fever (101°F). **Diagnostic evaluation:-** Unremarkable physical examination. Blood test: HB- 10.8 gm%, Total RBC count- 4.15 millions/cu mm, RDW –13.1%, Total WBC count-6100 /cu mm, Total platelets- 2.381 ACS/MM³. **Cytopathology Examination:-** Cervical cytology smear shows only scattered superficial and intermediated squamous cell with few neutrophils. **Colposcopy Examination:-** moderated dysplasia, chronic cervicitis. **Colposcopy findings-** cervical erosion seen on post lip, -Mosaic pattern of blood vessels seen on green filter, Aceto white areas seen at 7o'clock position, less iodine uptake at 7o' clock and 12o'clock positions, aceto white areas reduced as compared to previous colposcopy.

Therapeutic Intervention:- Vaginal hysterectomy lateral Sphincterotomy I/V/O Cervical Dysplasia Inj. Gentamazine 80 mg iv 12 hrly, Inj. Ctax 1 gm IV 12hrly, Inj. Pan 40 mg iv 12 hrly, Inj Metro 100 ml /8 hrs, Inj. Neomal 100 ml Iv 12 hrly, Inj Pause 8 hrly , zonac suppository TDS, Tab-Gabapentin 300 mg HS, Glucose powder, protein powder 2tbsp BD with milk. **Outcomes:-** After surgical treatment removing the cervical precancerous cells, the patient shows improvement with relieve of her abdominal pain and fever. **Conclusion:-** The patient was hospitalized to AVBRH gynecology unit with chief complain symptoms of abdominal pain, fever, and weight loss. After receiving proper therapy with....., her condition has improved.

Keywords:- Cervical dysplasia, precancerous cells.

Introduction:-- Cervical dysplasia or Cervical Intraepithelial Neoplasia is a precancerous disorder in which there is abnormal cell growth in the epithelial cells lining the uterine cervix, which connects the uterus with the vaginal canal.(1)

Cervical cancer starts in the cervix, which is the lower and narrow part of the uterus. The uterus holds the growing fetus during pregnancy.(2)The cervix connects the lower part of the uterus to the vagina, and with the vagina forms the birth canal.Cervical cancer begins when healthy cells on the surface of the cervix suffer a neoplastic change. This usually happens when they are infected with the Human Papilloma Virus (HPV). These cells grow and reproduce out of control and forming a mass called a tumor. (3)Long-term infection with HPV on the cervix can result in cancer, leading to a mass or tumour on the cervix. A tumor can be considered cancerous or benign.(4)One of the characteristics of a malignant tumour is that has the potential to spread to other regions of the body. The term "benign tumour" refers to a tumour that will not spread or metastasize.(5)

At first, the changes in a cell are abnormal, however not cancerous, these are sometimes called "atypical cells." Researchers believe that some of these abnormal changes are the first step in a series of slow changes that can lead to cancer. (6)Some of the atypical cells go away or disappear without treatment, but others can become cancerous. This phase of precancerous disease is called cervical dysplasia, which is an abnormal growth of cells. Sometimes, the dysplastic tissue needs to be removed to prevent the development of cancer. Often, the dysplastic tissue can be removed or destroyed without harming healthy tissue, but in some cases, a hysterectomy is needed to prevent cervical cancer (To prevent or to treat?). (7)A hysterectomy is the removal of the uterus and cervix.Cervical cancer is the second most common cancer in women in India, accounting for 16.5 % of all women cancer cases and 8.35% death among all cancer in both men and women (Globocan 2018).FIGO staging for carcinoma cervix is predominantly based on clinical examination(Does clinical examination includes cervical cytology?).(8)Precise staging is imperative for rendering cervical cancer is the second most common cancer in women in India,accounting for 16.5% of all cancer appropriate therapy,with concurrent chemo-radiation being the preferred of primary treatment for stages IB3 and above(NCCN version 5.2019). Clinical staging is subject to high inaccuracy with error rates ranging between 26 and 66%.(9)Hence,for proper assessment of the size and the extent of tumor, examination under

anesthesia can be required. Since there is muscle relaxation, the parametrium is better assessed under anesthesia, which may not be feasible in a conscious patient. CT and MRI are methods that can evaluate the patient conscious and there have been claims of better assessment stages. (10) This study attempts to identify the concordance between clinical examination, examination under anesthesia, and CECT with respect to the various parameters involved in staging of carcinoma cervix and to define the relevance of EUA in current scenario.

Patients demographics: 33 year old female from AVBRH Sawangimeghe Wardha admitted to gynecology ward on 03/06/2021, with chief complaints of abdominal pain, weight loss and fever. She is 52kg and her height is 152 cm.

Present Medical History: 33 year old female was brought to AVBRH by her relative with complaints of abdominal pain, fever, weight loss that started one month ago. There was no history of abnormal cervical or vaginal bleeding. The patient was admitted to gynecology ward. After investigation patient was diagnosed with cervical dysplasia.

Past Medical History: The patient had no past medical problems. About one month before her hospitalization, she started experiencing abdominal pain, it was insidious in onset, continuous type, not associated with bleeding PV.

The patient reported having history of spontaneous and MTP (maternal termination of pregnancy), maybe elective termination of pregnancy is a better definition.

DOM: - 6 years

P₁L₁A₅

P₁L₁: Female /5 years /FTND

A₁: Spontaneous /1.5 months /D and C done /3 year back

A₂: Spontaneous /1.5 months/ D and C done / 2 year back

A₃: 1.5 months /MTP by pills / 1 year back

A₄: 1.5 months /MTP by pills/1 year back

A₅:- 1.5 months /MTP by pills

Last menstrual period date:01/05/2021

Past Surgical History: History of cervical biopsy with histopathological analysis showing hypertrophied ectocervical lining with moderate dysplasia and chronic cervicitis done on 07/12/2020. The patient also has history of Laparoscopic fundal(?) cysts resection done in 2016.

Family History: No significant past medical family history, or history of cervical cancer.

(Clinical findings:- Abdominal pain , weight loss, fever (Temperature – 101°F) not necessary, is just repeated information).

Physical examination:- Unremarkable physical exam.

Diagnostic assessment:- Blood test: HB- 10.8 gm%, Total RBC count- 4.15 millions/cu mm, RDW – 13.1%, Total WBC count-6100 /cu mm ,Total platelets- 2.381ACS/MM³

Cytopathology Examination: Cervical cytology Smear shows only scattered superficial and intermediated squamous cell with few neutrophils.

Colposcopy Examination: moderated dysplasia, chronic cervicitis.

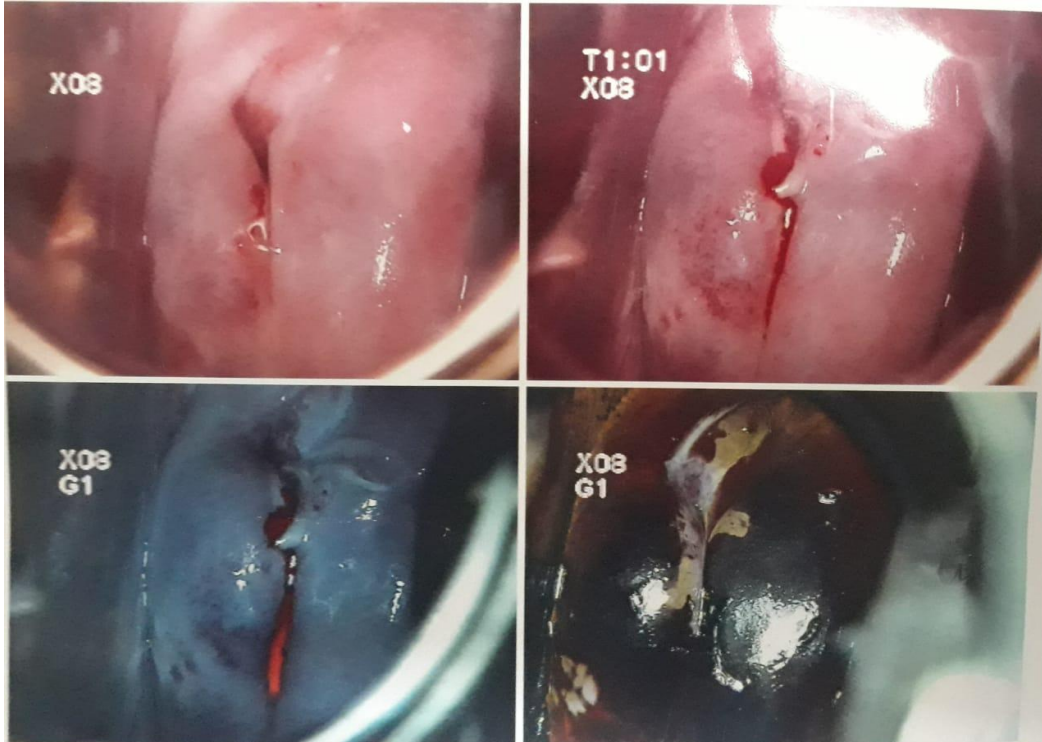
Colposcopy findings- cervical erosion seen on post lip.

-Mosaic pattern of blood vessels seen on green filter.

-Aceto white areas seen at 7o'clock position.

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Therapeutic Intervention:-Vaginal hysterectomy lateral Sphincterotomy I/V/O Cervical Dysplasia Inj. Gentamaine 80 mg iv 12 hrly, Inj. Ctax 1 gm IV 12hrly, Inj. Pan 40 mg iv 12 hrly, Inj Metro 100 ml /8 hrs, Inj. Neomal 100 ml Iv 12 hrly,

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Discussion:-The majority of cervical carcinoma staging is based on clinical examination.

Usually the signs and symptoms of cervical dysplasia normally arise gradually and might be very subtle or completely asymptomatic at first. In some rare cases there are some signs are present and they have been described as: abdominal or pelvic pain, loss of appetites, and weakness. (do you have references for this?).

Anaesthesia-assisted examination is an important aspect of the staging of cervical cancer. A number of studies have demonstrated the superiority of EUA over clinical examination, dating back to the work of J.R. Van Nagell et al, who found that EUA raised overall staging accuracy from 54 to 74 percent. B After EUA, Stefanon et al found a 24.5 percent change in clinical stage and a 10% change in therapeutic decision in 24.5 percent of patients. 3 In our study, there was an

11.2 percent difference in tumour size between EUA and clinical evaluation. Clinical examination failed to detect involvement in 7.4 percent of patients undergoing parametrium evaluation.(11)

Clinical examination failed to detect sidewall involvement in 68 percent of patients, indicating a considerable disparity in the extent of parametrial involvement. When compared to clinical evaluation, cross-sectional imaging modalities such as CT and MRI have been observed to increase staging accuracy. According to Hricak H et al., clinical staging has a sensitivity of 29 percent, CT has a sensitivity of 42 percent, and MRI has a sensitivity of 53 percent for detecting advanced stage (> or = IIB). When compared to surgical results, Ozsarlak et al. found that the overall accuracy of staging for clinical examination, CT, and MRI was 47, 53, and 86 percent, respectively.(12)

Despite the fact that CT has superior staging accuracy than EUA in the research described above, there is a substantial difference between CT and EUA in our study. In comparison to EUA, CECT severely understaged tumour size in 21.2 percent of patients. Cervical cancer can be depicted using CT, however it has limits. On contrast-enhanced CT, up to 50% of tumours are isodense to cervical stroma and so cannot be distinguished. As a result, there is a large disparity in the reported tumour size. Hancke et al. found that CT and MRI results were no better than palpation in the assessment of parametrial invasion (accuracy: CT 61 percent and 54 percent , MRI 61 percent and 56 percent , respectively). Whitley et al. also found that CT had low sensitivity in detecting pelvic side wall invasion. In our analysis, there was no parametrial involvement reported by CECT in 28.3 percent of patients who had parametrial involvement in EUA, which was similar to their experience.(13)

CECT has a low sensitivity for detecting side wall involvement, with 68 percent of individuals with illness reaching up to the side wall having no HUN or obvious lateral wall involvement in EUA. T.V Prasad et al. observed a similar low detection rate of pelvic sidewall involvement by CT. There is no significant difference between EUA and clinical evaluation when it comes to detecting fornix involvement. Pathological confirmation was not available to determine the accuracy of CECT and clinical findings since advanced cancer of the cervix is typically treated with chemoradiation.(14)

Conclusion: -33 year old female admitted to gynecology ward AVBRH with chief complaint of abdominal pain, fever(101°F), and weight loss. After appropriate clinical evaluation the patient was diagnosed with cervical dysplasia. The patient weight is 52 kg and her height is 152 cm. The patient was treated with non descending vaginal hysterectomy with sphincterectomy (can you maybe explain why was this the method of choice, complete hysterectomy for cervical dysplasia, versus more conservative treatments involving just the cervix).

For appropriate medical management of the cervical dysplasia or cervical cancer it is very important to diagnose it in early stage so that the patient future complications can be prevented. After getting treatment, the patient shows great improvement in her symptoms.

Ethical clearance: - Not required.

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