

A CLINICO MORPHOLOGICAL STUDY OF BENIGN TUMOURS OF THE CERVIX.

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SUMMARY

Benign tumours of the cervix formed 37.90 percent of all benign tumours of uterine corpus and cervix. Maximum cases (50.86%) were in the 4th decades of their life and multiparous (55.17%). Heaviness, pain in lower abdomen (31.03%) and watery discharge P/V (29.65%) were the common symptoms. Histologically mucous polyp (84.48%) accounted for the maximum number of cases followed by leiomyoma, condyloma, microglandular hyperplasia and angiomatous polyp. All benign tumours of the cervix histologically revealed plenty of inflammatory cells in addition to their original morphology suggesting that chronic inflammation is the main etiological factor for the development of most of the benign tumours of the cervix.

INTRODUCTION

The uterine cervix is a very vulnerable site for developing many types of benign as well as malignant tumours. The most commonly encountered benign cervical tumours are endocervical polyps, leiomyoma, microglandular hyperplasia and others. The present study included clinicopathological analysis of 116 benign tumours of the cervix. In spite of the frequent occurrence of these tumours in our country, very few references are found in the Indian literature.

MATERIAL AND METHODS

This study included 116 benign tumours of the cervix diagnosed within 2 years in the department of pathology. Specimens were obtained from department of obstetrics and gynaecology & Prasuti Tantra of University hospital BHU. Relevant clinical details were considered. Biopsy specimens were fixed in 10% formalin. In some cases the entire uterus together with cervix & adnexae were received, where gross findings were recorded. Specimen for biopsy were selected from proper sites & then processed. Routine paraffin blocks were prepared and 4 μ thick sections were examined in light microscope.



Fig. 1 : Shows endocervical polyp made up of proliferated endocervical gland in loose inflamed stroma. Some of (H & E x 50).

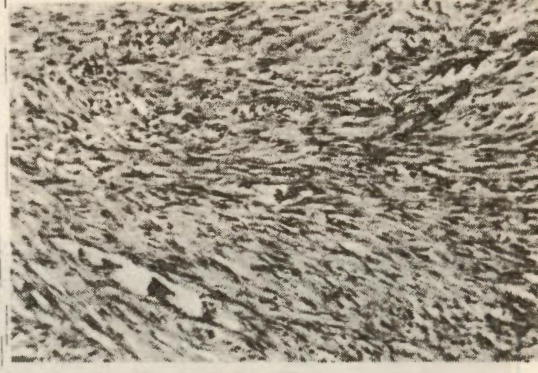


Fig. 2 : Shows cervical leiomyoma made up of proliferated bundles of smooth muscle arranged in parallel bundles. Lower portion shows chronic inflammation and focal areas of hyalinization also (H & E x 125).

TABLE I

Shows Age group of the patients
in benign tumours of cervix.

Age group in years	Benign tumours of cervix.	
	No.	Percentage
11-20	02	1.73
21-30	23	19.83
31-40	59	50.86
41-50	26	22.41
51-60	05	4.3
61-70	1	0.86
Total No. of cases	116	100

TABLE II

Showing parity distribution
of benign tumours of cervix.

No. of Pregnancy	No. of case	Percentage
Nulliparous	2	1.74
1-2	42	36.20
3-4	64	55.17
5-6	04	3.45
7-8	04	3.45
Total no. of cases	116	100

TABLE III

Depicts symptoms in benign
tumours of cervix.

Symptoms	No. of cases	Percentage
1. Watery discharge P/V	34	29.65
2. Foul smelling discharge P/V	22	10.34
3. Irregular bleeding P/V	25	21.55
4. Heaviness and pain in lower abdomen.	36	31.03
5. Dysmenorrhoea	06	5.68
6. Others	18	15.51

TABLE IV

Dipicts the histology of
the benign tumours of cervix.

Histologic type	No. of cases	Percentage
1. Endocervical mucous polyp	98	84.48
2. Leiomyoma	07	6.03
3. Condyloma	06	5.17
4. Microglandular hyperplasia	03	2.58
5. Angiomatous polyp	02	1.72

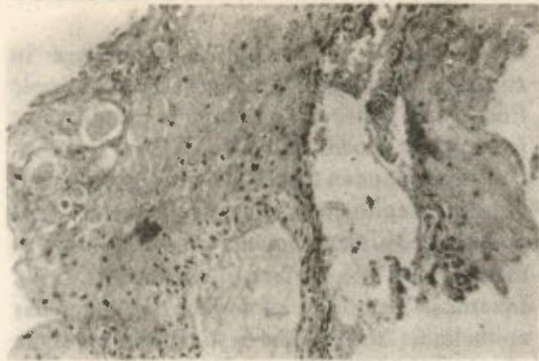


Fig. 3 : Shows condyloma planum characterized by metaplastic squamous epithelium showing acanthosis, koilocytosis, superficial keratinization and intracytoplasmic inclusion (H & E x 125).

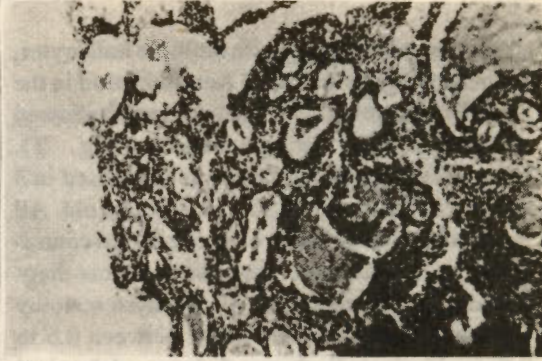


Fig. 4 : Microglandular hyperplasia of cervix showing proliferated small endocervical glands with focal reserve cell hyperplasia and squamous metaplasia. There is dense chronic inflammation in the polyp. (H & E x 125)

OBSERVATION

Total 306 tumours of uterine cervix & corpus were analysed within a period of 2 years, out of which 116 were from the cervix, hence the frequency of cervical neoplastic pathology was 37.90 percent. Age analysis revealed maximum cases in the 4th decade of life (50.86%) followed by 5th decade (22.41%) and 3rd decade (19.83%) (Table-I). Two cases of endocervical polyp were found in the age group below 20 years also.

Mean age was 39.05 ± 9.35 years. Parity distribution revealed that it was common in multiparous women (55.17%) having 3 to 4 pregnancies. About 36.20% cases had either one or two pregnancy. Only 2 cases were multiparous (Table II). The majority of patients of cervical tumours presented with bleeding per vaginum (21.55%), foul smelling discharge (18.96%) and pain in the lower abdomen (31.03%). Some patients had combined symptoms also (Table -III). Histopathology revealed that 84.48% tumours were endocervical polyps, followed by cervical leiomyoma (6.03%), Condyloma (5.17%) and others (Table -IV).

Endocervical polyp characterized by a polypoid mass made up of proliferated endocervical glands lined by epithelium on all sides. The epithelium of surface and gland was of mucin secreting tall columnar type (Fig.1) Surface epithelium showed varying degrees of squamous metaplasia (20 cases -20.41%) and ulceration 31

cases (31.63%). Majority polyps were heavily inflamed (80.83.67%) and had cystic dilatation of glands (75 cases - 76.53%) filled with mucinous material. Out of 98 cases, 68(69.38%) were resected endocervical polyp which were diagnosed clinically preoperatively but the rest of the 30 (30.61%) polyps were small & were diagnosed in hysterectomy specimens as incidental findings. Their size varied from 0.5 cm to 2.5cm. The shape was usually oval and the external surface was smooth. The cut surface revealed tiny cystic areas. In 6 cases it was associated with some other uterine tumours such as leiomyoma (5 cases) and adenomyoma uteri (One case).

The second most common tumour was cervical leiomyoma (Fig. 2). All presented with polypoidal mass projecting through cervix. Five out of these 7 cases were arising from the cervical region, the remaining two cases were submucous leiomyoma uteri projecting downward through the cervix, their size varied from 1.5cm. to 3 cms. Gross and light microscopy were similar to uterine leiomyoma. Three out of 7 (42.85%) leiomyomas were highly cellular & inflamed also. Diagnosis of condyloma was made only or microscopic examination because clinically they were diagnosed as bad cervixes. About 50 percent (3 cases) were of condyloma planum and the rest of the 50% were of condyloma acuminatum. Histology showed acanthosis of metaplastic squa-

mous epithelium along with multiple koilocytes, binucleated cells and focal Keratinization in the superficial layer. The tissue underneath showed dense chronic inflammation (Fig. 3). Microglandular hyperplasia was diagnosed in 3 cases. Patients were 25, 35 and 38 years old. All the 3 patients had history of intake of oral contraceptive for more than 8 months and were diagnosed after examination of the hysterectomy specimen. Size was very small between 0.5 to 0.8cm. Vaginal discharge & lower abdominal pain were the symptoms. Histologically there was a polypoidal lesion formed by proliferated small endocervical glands showing reserve cell hyperplasia & focal squamous metaplasia (Fig. 4). There was dense chronic inflammation as well as acute inflammatory cells in the polypoidal mass. Angiomatous polyp was seen in only two cases. It was made up of proliferated capillaries with surface ulceration & endothelial hyperplasia. Inflammation was mild. Both the patients were very young 28 years & 29 years & presented again with lower abdominal pain & dirty vaginal discharge off & on for last 6 months.

DISCUSSION

Benign tumours of the cervix formed 37.90 percent of all benign tumours of uterine corpus and cervix. Majority of the tumours were found in late thirties of their life (50.86%) and were multiparous (55.17%). Pain and heaviness in lower abdomen (31.03%), discharge per vaginum (31.89%) and irregular bleeding per vaginum (21.55%) were the common symptoms. In many cases symptoms were of mixed type. On examination more than 85% case presented as polypoid mass in endocervix. Histologically 84.48% polyp were of endocervical mucous type. Aaro et al (1963) also noticed these tumours in 4th to 6th decades of their life with multiparity. Pain in lower abdomen & bleeding per vaginum were the common manifestation in other series also.

In our present study since maximum cases (84.48%) are of endocervical polyp hence our clinical data such as age, parity clinical presen-

tation noted in benign tumours are in correspondance with them. Gross & microscopic findings of endocervical polyp is not different from others. Lowe and Slavin⁶ (1987) considered this lesion as a focal hyperplastic outgrowth of cervical epithelium rather than tumour. Other points noted in these tumours were heavy inflammation (83.67%), surface ulceration (31.63%), squamous metaplasia of surface and glandular epithelium (20.41%) and cystic dilatation of the glands (45.91%). These changes in varying proportion were described in others series also. These are purely benign lesions only 0.2 to 4% cases turned to carcinoma which may be either squamous or adeno carcinoma. Leiomyoma of cervix formed only 6.03 percent of all cervical tumours in our series but in other series it was found in 8% case. Pain & heaviness in lower abdomen, menstrual irregularities, polypoidal mass are common manifestations, but some times unusual presentation are met with e.g. cystocoele, inversion of uterus, infertility & abortions. Besides this ascitis, hydrothorax, polycythemia and pelvic infection can also be noted. Cervical condyloma was found in only 5.17% cases of benign tumours.

Now these lesions have become of utmost importance because most of these lesion progress & turn into carcinoma of the cervix. Syrjanen et al (1985) followed 343 women with cervical condyloma by papsmear & biopsy & noticed that after 18 months follow up about 4% condyloma progressed to cervical intraepithelial neoplasia and invasive carcinoma. Microglandular hyperplasia was seen in only 2.58% lesions with history of oral contraceptive pills. It is a comparatively uncommon tumour of cervix seen mostly in active reproductive age group taking either oestrogen or progesterone, Eact frequency is difficult to assess. Nichols & Fidler 1971 in a study of 128 cone biopsies taken from suspicious cervix, found MGH in 24% of cases and while Gall et al found MGH in only 3 cases out of 106 bad cervix. Hence the frequency of MGH is roughly 1.8% to 3% in benign cervical lesion.

Some MGH have a typical features and are easily misdiagnosed as adenocarcinoma differentiating points from the adenocarcinoma is reticulaed pattern, normal mitotic figurs and no stromal invasion. In only 2 cases we reported angiomatous polyp of cervix. Haemangioma of the cervix is comparatively a rare lesion and only Occasional case report are available. Concluding the study we found that majority of benign tumours of cervix were found in child bearing age group and have heavy inflammation indicating that these are reactive hyperplastic lesion of cervix secondary to inflammation, contrary to this majority of benign tumours of uterus are normal dependent.

Hence treatment of infection can prevent the benign growth of the cervix.

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SUMMARY

Adenomyosis was present in 67 (31%) of 216 consecutive hysterectomies performed over a period of three years. Adenomyosis was microscopically demonstrated in 17 cases (40.7%) and consisted with typical histology in 10 (58.8%) cases. Most patients were 40 to 50 years of age. Inflammation had not received therapy and had no prior abdominal surgery. Constant exposure of menarche was encountered in 52% of unoperated group and 40% of operated group. Microangioma was present in 22.2% and 48.8% patients with adenomyosis was seen in 11.8% and 22.8% cases respectively in the two groups. Endometriosis was the commonest associated disease present in 22.2% of cases with adenomyosis. The incidence of adenomyosis was seen in 14.7% of cases of unoperated hysterectomies. The incidence of adenomyosis was seen in only 4% of total cases.

INTRODUCTION

About 50% of all surgically removed cases of adenomyosis of the reproductive organs, described by Mikulicz (1891) and later by Mikulicz (1912). After it is an incidental pathological finding in a case removed for a non-obvious disease. The present retrospective study was carried out to know the incidence of adenomyosis in hysterectomies.

MATERIAL AND METHODS

The present data was derived from case sheets of hysterectomies performed in the Department of Obstetrics and Gynecology, Government Medical College and Hospital, Raipur during a period of three years from January 1986 to 31st December, 1988. Adenomyosis was reported in 67 patients on histopathological basis. The histological criteria for adenomyosis at this hospital is the presence of endometrial glands and stroma within the myometrium beyond the low power microscopic field for the endometrial junction. Location regarding of the grossly normal appearing field of stroma consists of two tissue sheets prepared from anterior and posterior surface with 1-2