# TUBERCULOSIS OF CERVIX*

**(A study of 23 cases)**

by

JAYASHREE KIRLOSKAR, M.B., F.R.C.S., D.R.C.O.G.,

PADMA TULASI, M.D.

C. C. VASANTHA, M.D.

Tuberculosis of cervix is considered to be a rare gynaecological condition. It surprises a gynaecologist when it is accidentally discovered after a routine cervical biopsy. It is probable that cervical tuberculosis is present more frequently than is realised.

The condition was first described by Renaud in 1831. Virchow clearly described a case in 1853. Moore, in 1919, collected 170 reported cases. In recent years more and more cases are being discovered as the gynaecologists have become more conscious of the necessity to take a biopsy from an unhealthy cervix.

A study was carried out at the Government Maternity Hospital, Hyderabad, A.P., from January 1961 to July 1967, of the cases of cervical tuberculosis. The condition was discovered and diagnosed on routine biopsy of an unhealthy cervix. During this period there were 283 cases of tuberculosis of genital tract, and 38 cases of cervical tuberculosis, giving an incidence of 13.4%. Of these 23 cases were investigated and followed up.

* *Paper read at the 14th All-India Obstetric & Gynaecological Congress held at Nagpur on 26/28th November 1967.*

TABLE I

*Comparison of incidence of cervical tuberculosis by various workers*

| Name | Year | Percentage |
|---|---|---|
| Greenberg .. .. | 1921 | 3.5 |
| White .. .. | 1926 | 8 |
| Penworth .. .. | 1947 | 5 |
| Liljedahl .. .. | 1951 | 4.7 |
| Malkani .. .. | 1957 | 12.4 |
| Present series .. | 1967 | 13.4 |

Routine endocervical scraping in cases of endometrial tuberculosis was not carried out by us. Hence, some cases must have been missed. With the same procedure Nogales quoted cervical tuberculosis in 24.9% of his cases.

Mode of infection is usually regarded as a direct spread from the endometrium. Haematogenous spread from the infected tube has been described.

There is a relative immunity of the cervix to tuberculosis due probably to the bacillus not being able to penetrate the squamous epithelium of portio vaginalis, the cervical mucus exerting defensive action and the great vascularity of the cervix offering resistance. Predisposing factors are, trauma causing discontinuity of

cervical epithelium and lowering of tissue resistance which reduces the bactericidal powers of the cervical secretions (Finlaison).

Primary tuberculosis of cervix is extremely rare and is very difficult to prove without doubt unless the whole genital tract is histologically examined (Haines).

TABLE II

*Incidence of cervical tuberculosis in relation to other sites of T.B. in genital tract*

| *Total cases* 283 | |
|---|---|
| Endometrium | 233 |
| Cervix | 38 |
| Tubes | 22 |
| Ovaries | 10 |
| Vagina | 2 |
| Vulva | 2 |

Nogales and Vilar reported 46 cases of cervical tuberculosis in 244 cases of tuberculosis of genital tract.

Clinically, the two main types are ulcerative and proliferative. Rarer forms, miliary and interstitial tuberculosis have been described.

In the ulcerative form the ulcers have serpiginous outline, clear cut edges and yellow base. The early ulcers are seen near the external os, probably as an extension from the endocervix.

The proliferative type may have single or multiple papillary processes. They may be pedunculated or sessile.

Finally, caseation occurs and leads to progressive destruction of the cervix.

The microscopic appearance resembles that of tuberculosis elsewhere. The cervical glands become hypertrophied and get filled with lymphocytes and serous exudate. Squamous metaplasia may occur.

TABLE III

| Clinical type | No. |
|---|---|
| Proliferative | 9 |
| Ulcerative | 6 |
| Erosion | 6 |
| Ectropion | 2 |
| Total | 23 |

TABLE IV

*Presenting symptoms*

| | |
|---|---|
| Leucorrhoea | 9 |
| Post-coital bleeding | 4 |
| Intermenstrual bleeding | 3 |
| Pain | 1 |
| Sterility | 6 |

Most of the cases complained of persistent leucorrhoea. Pain was conspicuous by its absence and was present when there were tubo-ovarian masses.

Maximum number of cases was between 20-30 years of age. In Finlaison's series 50 per cent were between 20-40 but wide variation is reported. One case, aged 50, had tuberculosis complicating genital prolapse.

*Menstrual history.* There were 5 cases of amenorrhoea of which one was primary, 2 of menorrhagia, 12 of scanty menstruation and 3 with normal cycles.

*Sterility.* There were 6 cases of primary sterility and 13 of secondary sterility.

One woman was post-menopausal, 1 came 2 months after abortion, one. 8 months after a normal delivery and another 15 months after delivery. It is interesting to note that the majority of women were parous.

Co-existing pathology of adenomysis was reported in one case and fibroid uterus in another case. One patient had an associated genital prolapse and another case was reported as carcinoma in situ with tuberculosis.

Invasive carcinoma of cervix closely resembles cervical tuberculosis but the cervix in tuberculosis remains remarkably mobile in spite of the long standing symptoms. One case who disappeared after the first biopsy came back after two years with an extensive lesion, but the cervix was freely mobile.

Once tuberculosis is discovered in the genital tract a search for primary focus must be made. All the routine investigations were carried out in these cases.

*X-ray of the chest.* This was done in 18 cases. There was active lesion in 4 cases, healed lesion in 2 and normal x-ray findings in 10 cases. Cavitation was seen in 2 cases.

*Endometrial biopsy.* This was done in 19 cases and in 14 cases there was endometrial tuberculosis. In the remaining 5 no tubercular lesion was detected.

It is almost certain that tuberculosis spreads to cervix from the endometrium. Of the negative cases, in two no endometrium was obtained for examination.

*Treatment.* Most of the patients were anaemic and undernourished. Attention was paid to the nutrition of the patient and anaemia was corrected. Antimicrobial therapy was started for all patients during their stay in the hospital.

One g. streptomycin, was given intramuscularly daily for 4 weeks. 100 mg. of Isonex, 3 times daily and 12 g. of P.A.S. daily in 3 divided doses.

It was not possible to continue the therapy for prolonged period as the patients got themselves discharged no sooner they improved, and those who were discharged for domiciliary treatment discontinued the drugs prematurely.

Six cases were followed up from 3 months to 2 years. Complete healing, proved histologically, occurred in all cases.

Two cases were operated upon and had a total hysterectomy and bilateral salpingo-oophorectomy. One of these two had interstitial tuberculosis and adenomyosis and another had carcinoma in situ of the cervix.

*Summary*

1. Thirty-eight cases of cervical tuberculosis were detected on routine biopsy at Government Maternity Hospital over a period of six years and a half.

2. There were 283 cases of genital tuberculosis during that period, giving an incidence of 13.4 per cent. Twenty-three cases were investigated.

3. Infection is usually by downward spread from the endometrium.

4. Proliferative and ulcerative lesions are common.

5. The lesion usually responds to chemotherapy. Surgery was performed in 2 cases. One had carcinoma in situ and another had menorrhagia with adenomyosis.

*Acknowledgement*

I am thankful to Dr. B. S. Surti, FCPS., FICS., FRCS., FRCOG., Superintendent, Government Mater-

nity Hospital, Hyderabad, A.P., for making the statistics available for this paper.

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