

A CASE OF CALCIFICATION AND SUPPURATION IN FIBROMYOMA

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Fibromyomata are the commonest of all pelvic tumours found in women. But, the phenomenon of suppuration is extremely rare in myomas, especially, in the interstitial variety. Miller (1945), in a review of the literature since 1871, mentions less than 75 cases of suppuration in fibroids. In his series, suppuration occurred mostly during the puerperium between the ages of 19 and 46.

Ferris (1957) has recently reported a case of abscess formation in an interstitial myoma.

Case Report:

Mrs. E., aged 58 years was admitted on 7-12-1957 with a history of fever and heaviness in the lower abdomen of five months' duration. Micturition was not disturbed. Bowels were regular. Her periods, till menopause 8 years ago, were regular, once in 30 days lasting for 3 days, moderate and painless. She had never conceived, nor had had any operation like curettage.

On examination, she was emaciated and cachectic. Cardiovascular system and lungs were normal. Liver and spleen were not enlarged. Abdominal examination revealed a well defined cystic swelling in the midline, arising from the pelvis and extending up to the umbilicus. It was not tender, and appeared to be fixed. There was no free fluid in the peritoneal cavity. On vaginal examination, the same tumour was felt through all the fornices and it was the size of about 24 weeks'

pregnancy. It was not tender and the mobility appeared to be restricted. The body of the uterus could not be made out separate from this tumour. There were no secondaries in Douglas' pouch on vaginal or rectal examination. Blood pressure 110/70 mm. mercury. Temperature 101°F.

Investigations

Blood: Haemoglobin 55% W.B.C. total 20,600 per c.mm. with preponderance of polymorphs. Blood smear—No malarial parasite. E.S.R.—65 mm. in one hour. Gel and Chopra—positive. Widal and Culture—Negative. Blood urea—18 mg. percent.

Urine: Microscopic examination—No pus cells; Culture—B. coli grown.

X-ray Chest: No tuberculous lesion or evidence of secondary malignancy.

Plain X-ray of Abdomen: Patchy calcified shadows in the region of the tumour (Fig. 1).

Intravenous Pyelogram: Renal function normal; mild pressure effect on right ureter.

Vaginal Smear: After staining with Papanicolaou's no malignant cells were seen.

Endometrial Biopsy: Uterine sound could be passed upto 5"; no pus was obtained. A single endometrial strip was removed.

Histopathological report: Atrophic endometrium.

The patient was treated with streptomycin and later with Tetracycline and penicillin, with no response. Temperature was ranging between 99° and 102°F. Stibatin (Pentavalent Antimony com-

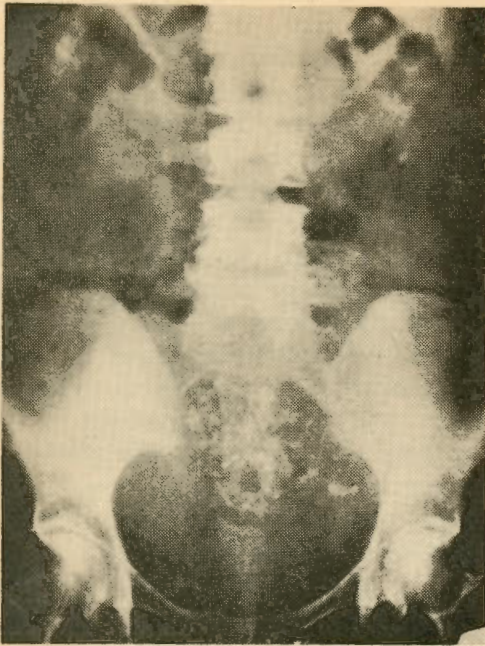


Fig. 1

Skiagram of abdomen showing patchy calcification of myoma uterus.

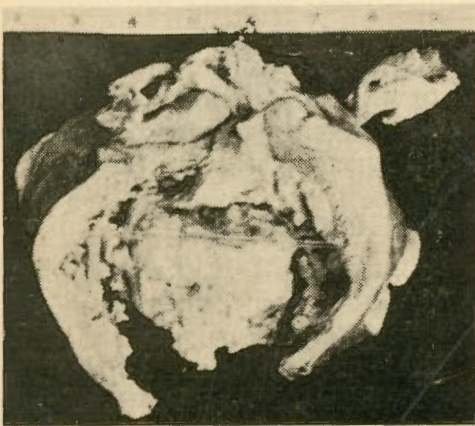


Fig. 2

Cut section of tumour showing calcification and abscess cavity.

pound) was tried in view of positive Gel and Chopra test even though leucocytosis and absence of enlargement of liver and spleen were against diagnosis of Kala-Azar. The temperature continued to be

irregular and her condition was slowly deteriorating. It was decided to operate upon her, the patient herself being prepared for any risk. In spite of the fever, a blood transfusion was given without any reaction.

On 17-1-1958, that is 41 days after admission, she was operated upon. On opening the abdomen, uterus was found to be enlarged to the size of 24 weeks' pregnancy, and it was free from adhesions. Both the tubes and ovaries were normal. Total hysterectomy and bilateral salpingo-oophorectomy was done. Cut section of uterus showed a big interstitial fibroid with areas of patchy calcification. The uterine cavity was elongated and part of the tumour was encroaching into the endometrial cavity at the fundus. The tumour contained an abscess cavity filled with a pint of thick pus. There were two more small interstitial fibroids in the uterus (Fig. 2).

Histopathological examination showed infected degenerating fibromyoma with suppuration and calcification. There was no evidence of infection in the tubes and ovaries.

The pus on culture showed staphylococci.

The post-operative period was uneventful. Her temperature returned to normal about 12 hours after the operation. She continued to be afebrile till she was discharged from the hospital. On the fifteenth post-operative day white cell count was 8000 per c.mm; haemoglobin 70% and B.S.R. 45 mm. in one hour. She was discharged well on the twentieth post-operative day.

Discussion

Blood supply to a myoma is contained in its false capsule from which the vessels enter the tumour on all sides. The blood supply is least at the centre of the myoma. Calcification in a myoma occurs along the course of the blood-vessels to give a patchy calcification or occasionally a peripheral "eggshell" distribution

or may convert the fibroid into a "womb stone." Calcification is a degenerating process due to circulatory impairment and is seen usually in postmenopausal women and in pedunculated subserous fibroids. It is never met with in the submucous variety.

According to Novak (1952), infection and suppuration of myoma is most prone to occur in the submucous variety and even then abscess formation in the substance of the tumour is rare. The portal of entry is from the genital tract after miscarriage or parturition or uterine curettage. In like manner, subserous variety may be secondarily infected from appendix, fallopian tube and sigmoid-diverticulitis and then proceed to abscess formation. So, abscess formation seems to be the least common in the interstitial variety.

On rare occasions, the infection may be blood borne and according to Shaw (1956), "haematogenous infection of myoma may occur as a result of general infection with staphylococci, streptococci and bacillus coli. Metastatic abscesses of this kind are rare."

In this case, the patient's main complaints were irregular fever and tumour abdomen. Complete investigation pre-operatively did not reveal the cause of pyrexia. She did not respond to any of the antibiotics as the pus was well encapsulated. The temperature returned to normal dramatically soon after the operative removal of this septic focus. The in-

fection of myoma in this case is staphylococcal in origin which is shown on culturing the pus. It is difficult to speculate the source of this infection. The uterus was not adherent to the surrounding structure and the myoma was of the interstitial variety. Besides, she was a nullipara who had not undergone any pelvic operations before. Probably, therefore, the infection might have been haematogenous in origin. Suppuration in myoma is extremely rare and was not thought of pre-operatively. If that diagnosis was suspected earlier, she could have been operated a few days after admission into the hospital.

Summary

A rare case of suppuration in a calcified interstitial myoma in a postmenopausal nulliparous woman is described and briefly discussed.

In a case of myoma uterus with irregular fever, when all the causes of pyrexia are ruled out, suppuration of myoma should be suspected and surgical treatment adopted.

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References

1. Ferris, K. P. and Soltau, D. H. K.: *J. Obs. Gyn. Brit. Emp.*, 64, 738, 1957.
2. Irvin Miller: *Am. J. Obs. Gyn.*, 50, 522, 1945.

3. Jeffcoate, T. N. A.: Principles of Gynaecology. Butterworths, London, 406, 1957.
4. Novak, E.: Gynaecological and Obstetric Pathology. 3rd Edition. W. B. Saunders, Philadelphia, 208, 1952.
5. Shaw, W.: Text book of Gynaecology. 7th Edition, London, 500, 1956.