

LIPOMA OF CORPUS AND CERVIX UTERI

(Report of three cases with Review of Literature)

by

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Lipoma is a rare tumour of the uterus, composed of adult adipose tissue, often with collagenous and muscular tissue, well demarkated from the surrounding myometrium. Ikonomou (1947) in his publication on fat tissue tumours of the uterus distinguished three categories. The first he named 'pure lipomas', these tumours are composed of only fat cells. The second group includes those with the addition of some fibromatous or myomatous tissue. Some authors call these tumours lipofibroma, lipofibromyoma or lipomyoma. The third group "immature lipomas" belongs to liposarcomas of the uterus.

The literature of lipoma of uterus has been reviewed in short by Gupta *et al* (1964). Elis in 1906 analysed 2649 uterine tumours in London and 4911 in Vienna and found only 4 true lipomas. Peterson in 1922 collected 31 mixed tumours of the uterus of which 10 were interpreted as lipomas. Forty-one lipomas were recorded by Howe and Kellert in 1950. A few more reports have been added to the literature.

During the period of about last 7 years

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only 3 cases of lipoma of uterus have been reported from our laboratory. Since these cases are rare it will be worth while to report these three additional cases.

CASE REPORT

Case 1: A Hindu female aged 50 years was admitted with the complaints of bleeding per vaginam and pain in the abdomen for 2 months.

Obstetric History: She had 10 full term normal deliveries and youngest child was 10 years old.

Menstrual History: Previous menstrual cycles were normal. Menopause for the last 2 years.

Vaginal Examination: Uterus was bulky, about 12 weeks' size. Adnexae, nil abnormal. With this she was diagnosed as postmenopausal bleeding and diagnostic dilatation and curratage was done. The report was scanty endometrium. Very few glands. No evidence of malignancy. Total hysterectomy was done on 25-2-1966

Pathologic Findings: The specimen was uterus with bilateral adnexa and cervix. Uterus was bulky about 12-14 weeks size. On cutting the uterus a well circumscribed yellowish mass about 4 x 5 cms. soft was seen. The appearance was homogenous yellowish in colour. By the side of tumour a small fibroid 3 x 2 cms. in size, firm, whitish and of whorled appearance was present. Cervix, tubes and ovaries were normal (Fig. No. 1).

Microscopic: Microscopic examination revealed a typical lipoma. Tumour was composed of lobules of adult fat cells separated by connective tissue stroma. Lower down myometrium and endometrial glands seen. (Fig. No. 2).

Case 2: A Hindu female, aged 45 years was admitted with the complaints of pain in the periumbilical region since 4 months and irregular profuse periods of same duration.

Obstetric History: She was married 25 years back, sterile, no history of abortion.

Menstrual History: Previous menstrual history was normal.

Vaginal Examination: The uterus was retroverted, retroflexed, normal in size. She was diagnosed as a case of functional uterine haemorrhage and diagnostic dilatation and curettage was done. The report was secretory phase, no evidence of malignancy. Laparotomy was done on 4-8-1966. At laparotomy it was seen that there were adhesions from the greater omentum to the pelvic peritonium. Uterus was slightly bulky. Total hysterectomy was done.

Pathologic Findings: The specimen was uterus with bilateral adnexa. Uterus was slightly bulky. On cutting, it was seen that a small tumour about 1 x 1 cm. in diameter near the internal os. Tumour was yellowish, soft, and well circumscribed.

Microscopic Examination: Fibrolipoma.

Case 3: A Hindu female, aged 30 years was operated on 5-10-1972 at district hospital, Akola, and specimen received here was a stump of cervix with a small growth arising from the cervix of a size 1 x 1 cm. Tumour was soft, yellowish and well circumscribed.

Microscopic Examination: Bopsy showed lipoma with necrosis and calcification. At some places inflammatory reaction was present. Cervical tissue was seen (Fig. 3).

Discussion

The histogenesis of these tumors is debatable. Different theories concerning the histogenesis of these tumours have been put forth by various workers. All these theories have been compiled and narrated by Brandfas *et al* (1955). Briefly they may be listed as follows:

1. Misplaced embryonic fat cells.
2. Metaplasia of muscle cells into fat cells.
3. Metaplasia of connective tissue into fat cells.
4. Lipolytic differentiation of a specific primitive connective tissue cell.

5. Perivascular fat cells accompanying the blood vessels into the uterus.

6. Inclusion of fat cells into the uterine wall during surgery.

7. Fatty infiltration or degeneration of connective tissue in the uterus.

Of these the most popular ones are,

(1) Origin from misplaced embryonic cells and

(2) The result of metaplasia of muscle or connective tissue cells.

Meyer in 1903 and Merkel and Knox in 1901 as cited by Gupta *et al*, (1964) believe that they are true fat cells arising from the embryonic mesoderm. These authors have shown that there is an inclusion of mesodermal connective tissue with lipogenic potential between the diverging mullerian ducts about their point of fusion. This tissue bears a resemblance to retroperitoneal tissue and is lipogenic in nature. It is to be noted that lipomas are rare in the cervix where the mullerian ducts are closely approximated.

Lipoma of the uterus rarely occurs as an isolated tumour and is frequently associated with leiomyomas as in our case No. one; clinically, fibroleiomyoma and lipomas cannot be distinguished. The majority occur in the corpus uteri and vary between a few millimeters to 10 cm. in diameter. In our cases, case No. 1 was big 5 x 4 cm., while the other two were very small about 1 x 1 cm. in size. The peak incidence is in the fifth and sixth decades in postmenopausal women. Case No. 1 occurred in a postmenopausal woman, while case No. 2 was a case of sterility, which is rather unusual.

The diagnosis of lipoma is usually made only after laparotomy by study of the excised specimen or as an incidental finding at necropsy. No evidence of malignant transformation of these tumours has been recorded up to the present time, although

such change does occur in lipoma in other areas.

Summary

Two cases of lipoma of body of uterus and one case of cervical lipoma are reported. A brief review of literature with notes on histogenesis of these tumours is presented.

References

1. Brandfas, R. T. and Evertz—Surez, E. A.: Amer. Jour. Obst. & Gynec., 70: 359, 1955.
2. Chachutow, D. and Brill, R.: Lipoma of uterus. Amer. Jour. of Obst. & Gynec., 73: 1358, 1957.
3. Elis, A. G.: Surg. Gynec. & Obst., 3: 658, 1906.
4. Gonzalez—Augulo, A. and Kaufmann, R. H.: Lipomatus tumours of uterus Obst. & Gynec., 19: 494, 1962.
5. Gutu, R. K. and Richard E. Hunder: Lipoma of uterus, 24: 255, 1964.
6. Howe and Kellort 1950. Quoted by Ref. No. 5.
7. Ikonomou, R. T. 1947: Quoted by Ref. No. 2.
8. Kauter, A. E. and Zymno, B. P.: Lipomas of Gynaecological interest. Amer. Jour. of Obst. & Gynec., 71: 376, 1956.
9. Knoxlgol: Quoted by Ref. No. 5.
10. Meyer 1903: Quoted by Ref. No. 5.
11. Pesterson, A. G.: Jour. Lab. & Clin. Medicine, 8: 369, 1922.

See Figs. on Art Paper VI-VII