

STRUMA OVARIII

(Two Case Reports)

by

(Mrs) R. KALRA,* M.S.

V. B. KALRA,** M.D.

P. M. SAREEN,*** M.D.

and

S. K. LODHA,**** M.D.

Introduction

When teratomatous thyroid tissue overgrow other constituents in an ovarian teratoma, the tumour is known as "Struma Ovarii". To call a tumour struma ovarii, the whole tumour or the major part of it should be made up of thyroid tissue. Islands of thyroid tissue in a teratoma are not enough to call a tumour as struma ovarii.

Pick (1901) was the first one to conclude the origin of the tumour as teratomatous. About half of these ovarian strumas contain other teratomatous elements (Smith, 1946). Serial sections of one specimen showed epithelial continuity between the thyroid tissue and the probably equivalent of a buccal cavity (Hughesdon, 1955). Two case reports of struma ovarii are being presented with a brief review of literature.

Case 1

Mrs A. K., 26-year Hindu female was admitted for irregular pain in lower abdomen and

*Reader in Obstetrics and Gynaecology.

**Reader in Pathology.

***Lecturer in Pathology.

****Lecturer in Pathology.

Sardar Patel Medical College, Bikaner.

Accepted for publication on 2-5-80.

swelling of abdomen for 5 years. She was also having irregular vaginal bleeding for last 6 months. Her menstrual cycles were 3-5/30 days. She had no history of childbirth or abortion.

No abnormality was present on general and local examination. Abdominal palpation revealed a lump in lower abdomen measuring about 6" x 5". The mass was irregular in shape, cystic and mobile. On bimanual examination a mass was felt through right fornix measuring 6" x 5" and cystic in consistency. Routine laboratory investigations and plain x-ray abdomen did not reveal any abnormality.

On laparotomy right ovary was enlarged, cystic measuring 6" x 5" x 3" with smooth glistening white external surface. No adhesions were present. Uterus, both tubes and left ovary were normal. Right ovarian cystectomy was done. Post-operative period was uneventful and patient was discharged on 10th post-operative day in a satisfactory condition.

The cyst was multilocular with smooth inner surface and thick amber coloured fluid. Some of the loculi contained greyish-white gelatinous material. On microscopic examination thyroid tissue in the form of acini having flattened epithelium was seen. The lumen contained colloid material. The histopathological diagnosis was struma ovarii.

Case 2

Mrs P. K., 35-year old Hindu female was admitted for a painless swelling in right lower part of abdomen for 8 months. This swelling had been gradually increasing in size. She had delivered 2 normal babies 3 and 5 years back. Her menstrual cycles were regular, 3-4/30 days.

General and systemic examination did not re-

veal any abnormality. On abdominal examination a mass was palpable in the lower abdomen measuring about 12" x 6". The mass was irregular in shape, cystic and considerably mobile. On bimanual examination, an irregular mass was palpated through posterior fornix, separate from the uterus, 12" x 6" in size. Routine laboratory investigations and plain X-ray of the abdomen did not reveal any abnormality.

On laparotomy, right ovary was enlarged, cystic, measuring 12" x 6" x 5" in size. No adhesions were present. Uterus, both tubes and left ovary were normal. A panhysterectomy was done. The external surface of the ovary was smooth and glistening white. The post-operative period was uneventful and she was discharged from the hospital on 12th post-operative day.

On cutting the tumour it was multilocular containing gelatinous greyish-white material in the loculi. On microscopic examination thyroid tissue in the form of acini having flattened epithelium with pink colloidal material in the lumen was seen. The histopathological diagnosis was struma ovarii.

Discussion

Struma ovarii is an uncommon tumour, so much so that Oumachigui *et al* (1975) encountered only 1 case of struma ovarii from 1967 to 1973. Upto 1966, there were 276 proved cases of struma ovarii in world literature (Woodruff *et al*, 1966).

The tumour may occur at any age but the maximum incidence is in the late reproductive age group. In our case reports

the patients were of 26 and 35 years' age respectively.

There is no distinct relationship between parity and occurrence of struma ovarii. In present study, one case was sterile while the other had 2 normal babies.

Some cases of struma ovarii are associated with thyrotoxic manifestations. In present study, there was no clinical evidence of thyrotoxicosis and following surgical removal struma ovarii the cases were euthyroid till date. Most of the pure struma ovarii run a benign clinical course. In present study, both cases were benign.

Summary

Two cases of struma ovarii aged 26 and 35 years have been reported with brief review of literature.

References

1. Hughedson, P. E.: *J. Path. Bact.* 70: 35, 1955.
2. Oumachigui, A., Sankaran, V. and Nayak, P. N.: *J. Obstet. Gynec. India.* 25: 554, 1975.
3. Pick, L.: *Arts. Gynec.* 64: 670, 1901.
4. Smith, F. G.: *Arch. Surg.* 53: 603, 1946.
5. Woodruff, J. D.W., Routh, T. T. and Markley, R. L.: *Obstet. Gynec.* 27: 194, 1966.