the absence of mental changes and family history. Secondly, the meningeal reaction was not present. Thirdly, the lesion in the corpus striatum was strictly confined to the caudate nuclei with normal lentiform nuclei. The thalamus showed no pathological abnormality. Fourthly, it is stated by various authors that the lesion in the corpus striatum affects principally the small ganglion cells with sparing of, or slight affection of, the large one (Jacob, 1923). In our case both types of cells were damaged and atrophied. Lastly in contradistinction to previously reported cases in which the main brunt falls on the fourth, fifth and sixth layers of the cerebral cortex with sparing of the first three layers, in our case just the reverse has occurred.

REFERENCES


A BILATERAL AND FUNCTIONING BRENNER TUMOUR OF THE OVARY

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Brenner tumours of the ovary are encountered only rarely. Mackinlay (1956) considers that few authors deal with more than four or five cases in their lifetime. This particular case was associated with uterine haemorrhage many years after the menopause. The other interesting feature was that the Brenner tumour was bilateral. Farrar and Grene (1960) surveyed the literature and found only 27 reported cases of bilateral Brenner tumours of the ovary and to these they added two of their own.

Case Report
Mrs. T. B., aged 67 years, was originally seen on 3rd August, 1963. The marriage had been childless and there were no miscarriages. The menopause occurred at the age of 44; this was completely uneventful until the beginning of June, 1963, when she started losing blood p.v. The bleeding was intermittent in nature with periods of complete freedom varying from seven to ten days. The blood loss was described as slight to moderate "much like a period" and was associated with slight lower abdominal pain, hot flushes and heaviness in the breasts.

Her general condition was good. Routine abdominal and bimanual examination was inconclusive as the patient's abdomen was pendulous and very obese.

An examination under anaesthesia, followed by a diagnostic curettage, were performed on the 9th August, 1963. The vulva, vagina and cervix were normal. The uterus was anteverted, mobile and definitely bulky, but had a smooth surface and a firm consistency. The left ovary was hard, mobile and approximately the size of a pigeon's egg. The right ovary was definitely palpable and was judged to be slightly enlarged though not to the same extent as that on the left side. The uterine sound was introduced to a length of 4½ inches. On curettage profuse bulky curettages were recovered.

Two days later a total hysterectomy and a bilateral salpingo-ophorectomy were carried out. At operation the findings of the previous examination...
under anaesthesia were confirmed. The uterus was
definitely enlarged and the normal ovarian tissue
on both sides was replaced by a solid tumour, that
on the left side being approximately twice the size
of that on the right. There was no evidence of any
free fluid or of any metastases in the pelvic cavity.

Pathological Report

The external surface of the uterus is smooth. The
myometrium shows a number of small myomata.
The endometrium presents an uneven, granular, and
haemorrhagic appearance and, in some areas, small
pedunculated polypi are present.

Both tubes are engorged and show no gross ab-
normality.

The left ovary is enlarged, measuring 4.5 x 4 x
3.8 cm. and has a smooth, nodular, external surface
and is hard in consistency. On section it is seen
to consist of compact yellowish-grey tissue which is
capsulated—the capsule stripping with difficulty.
The right ovary measures 2.8 x 1.8 x 1.8 cm. and
shows similar characteristics to the left ovary except
for a looser texture within.

Microscopically, section from both ovaries shows
a markedly fibrotic organ with islands of closely
packed, rounded, uniformly-shaped cells typical of
Brenner tumour—Figs. 1 and 2. Sections from the
curettings and endometrium show a proliferating
endometrium made up of a closely packed, distorted,
unevenly and unequally dilated glands lined by non-
secretory epithelium. A few are highly dilated in
cyst-like fashion and lined by low cubical epithelium.
In spite of the atypia, malignancy can be ruled out.

Discussion

The histogenesis of Brenner tumours of the
ovary remains very debatable, but the histological
picture presents definite characteristics enabling
one to make a diagnosis. The other intriguing
aspect of Brenner tumours—whether they are
always inert or whether they may at times secrete
oestrogenic hormone—is receiving considerable
attention in the medical press. Meyer (1931),
Novak and Novak (1958), Jondahl, Dockerty and
Randall (1950) and several other authors claim
that Brenner tumours do not secrete any hor-
mones. Haines and Taylor (1962) are of the
opinion that this tumour is “unassociated with
endocrine anomalies”; however they remark that
“occasional examples of such anomalies have
been recorded”.

Te Linde (1930) is credited as the first to de-
scribe a case of Brenner tumour of the ovary
associated with endometrial carcinoma and hyper-
plasia. Two years later, Schiffmann (1932) re-
ported two cases of postmenopausal uterine
bleeding and hyperplasia of the endometrium in
conjunction with Brenner tumour of the ovary.

Lately, Ming and Goldman (1962) collected
from the literature all those cases of Brenner
tumours of the ovary which were found in post-
menopausal patients only and in whom the endo-
metrium had been studied. They grouped together
66 such cases and, to these, they added 3 of their
own. In these 69 cases their findings were as

follows: In 75% the endometrium showed
hyperplasia, carcinoma or polypoid formation;
frank endometrial hyperplasia was present in 26
cases and in 20 of these, post-menopausal uterine
haemorrhage was present. Carcinoma of the body
was detected in 12 cases, while the endometrium
was atrophic in only 7 patients.

Shaaban, Abdine and Younel (1960) published
their case of Brenner tumour of the ovary in a
postmenopausal woman aged 60 years. Histology of
the excised uterus revealed endometrial carci-
номa, metropathia haemorrhagica, adenomyosis
uteri and a uterine myoma. Furthermore, they
carried out vaginal smears and assessed, as well,
the oestrogen levels in the patient’s urine. Both
these investigations showed a level of oestrogenic
activity which is definitely higher than would be
expected in a woman past her menopause.

Although the more recent reports in the litera-
ture tend to suggest that some Brenner tumours
are capable of hormonal activity, further research
is obviously necessary before their true nature can
be evaluated with certainty. A histological exami-
nation of the uterine curettings and of the excised
uterus (in cases where a hysterectomy has been
Carried out) must remain an essential step in
assessing indirectly the hormonal activity or

Fig. 1.—Brenner tumour of the ovary. Cellular
epithelial island and stroma (× 25).

Fig. 2.—High power of cystic spaces and typical
cells. (× 50).
otherwise of the tumour. Examination of the tumour for stainable fat is also recommended. Furthermore, vaginal cytology for oestrogenic activity and estimation of circulating oestrogenic hormone should also be performed in laboratories where facilities for such investigations exist.

The view expressed by Novak and Woodruff (1962) in relation to the functioning properties or otherwise of Brenner tumours of the ovary appears to reflect the current trend of thought. These authors state: “We may have to revise our ideas about the inert behaviour of Brenner and other tumours in view of repeated reports of cases associated with evidence of oestrogen activity. In addition, there is increasing belief that the stroma of certain tumours may be converted into cells capable of steroid function . . . We are currently willing to admit that the Brenner tumour may on occasion act in an oestrogenic role.”

I wish to thank Dr. F. Calleja, Pathologist, St. Luke's Hospital, Malta, for the examination of the curettings and of the excised organs.

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ILEAL PERFORATION AND ACUTE PERIPHERAL NEUROPATHY IN RHEUMATOID ARTHRITIS

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Perforation of the bowel during the course of rheumatoid arthritis treated with corticosteroids has been reported on several occasions. In the following case systemic steroids had never been administered and perforation occurred together with fulminating peripheral neuritis involving all four extremities.

Case Report
A 59-year-old policeman had suffered from rheumatoid arthritis since 1953. The onset was gradual, multiple joints becoming involved, and treatment was initially conservative, employing splinting, physiotherapy, salicylates, phenylbutazone and gold to a total of 1 gram. In 1956 he had a carpal tunnel syndrome. The following year he complained of muscle pains and weakness; electromyography showed evidence of polymyositis in the small hand muscles and the urinary creatine output was 290 mg./24 hr. In January 1962 he complained of increased muscular pain and weakness, although the disease in the joints at this time was only moderately active. Eleven months later he had numbness and burning pain in both feet and then in the hands and at this time he complained of colicky abdominal pain and diarrhoea with blood in the stools on one occasion. He had lost one stone (6.5 Kg.) in weight during the previous 3 months.

He was admitted to the Royal Free Hospital on 15th January, 1963, when examination revealed moderately active rheumatoid arthritis with sub-cutaneous nodules and wasting of the forearm and small hand muscles. There was bilateral, nearly symmetrical weakness of the arms and legs, all the deep reflexes were greatly diminished and there was loss...
A Bilateral and Functioning Brenner Tumour of the Ovary

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