Metastatic carcinoma in a spinal meningioma

ANTHONY D. HOCKLEY

From the Department of Neurological Surgery and Neurology, Addenbrooke's Hospital, Cambridge

SYNOPSIS Metastatic mammary carcinoma invaded a spinal meningioma.

Metastasis from one tumour to another is very rare. Invasion of an intracranial meningioma by a metastatic tumour has previously been reported in five cases. Two of these arose from a breast carcinoma (Bernstein, 1933; Lapresle et al., 1952), two from a bronchial carcinoma (Fried, 1930; Osterberg, 1957), and in one the histological appearance suggested a renal cell origin (Osterberg, 1957), although neither laparotomy nor necropsy was performed and the renal tumour was never satisfactorily demonstrated by other means. It is the purpose of this communication to present an instance of metastasis from a breast carcinoma to an intradural spinal meningioma.

CASE REPORT

The patient, a 72 year old woman, was admitted to Addenbrooke's Hospital in July 1971 having had a

FIG. 1 Myelogram demonstrating upper cervical intradural tumour.

FIG. 2 Invasion of the meningioma by secondary carcinoma. H and E, ×45.
left radical mastectomy followed by deep x-ray therapy to the chest wall and left axilla for carcinoma of the breast six years previously. She complained of pins and needles in her left hand with increasing weakness of her left arm and leg over two weeks, and two days before admission she noticed pins and needles with weakness in the right leg. There had been no sphincter disturbance.

On examination there was no evidence of local recurrence of her breast carcinoma but there was a small subcutaneous nodule above the left shoulder blade. There was a spastic quadriaparesis with more marked weakness of the left limbs and evidence of a Brown-Séguard lesion with sensory loss to pin prick on the right side of her body and limbs below C4 dermatome. Posterior column sensation was preserved on the right side but there was loss of joint position and vibration sense on the left.

Investigations included a haemoglobin of 12.7 g/dl and an ESR of 40 mm/hr. Radiographs of her cervical spine showed generalized degenerative changes only and there was no evidence of bony metastasis in her chest, pelvis, or remaining spine. A lumbar myelogram showed an almost complete obstruction to the flow of iophendylate opposite the second cervical vertebra (Fig. 1) with displacement of the spinal cord to the right due to an intradural space occupying lesion. Cerebrospinal fluid obtained at this examination had a protein content of 80 mg/dl.

An upper cervical laminectomy was carried out and the dura mater opened to show a hard oval tumour 2 cm in length which was removed together with its dural attachment. The subcutaneous nodule overlying the left scapula was also excised.

Histological examination of the spinal tumour showed a psammomatous meningioma invaded by secondary carcinoma (Fig. 2). The dura mater was infiltrated by tumour of similar appearances and the subcutaneous nodule also showed the same pattern of secondary carcinoma.

Postoperatively she improved, her right upper limb and legs soon returning to normal, although there was still some mild weakness and subjective sensory abnormalities in the fingers of her left hand. She returned home three weeks after surgery.

DISCUSSION

While the distribution of many metastatic tumours may be explained by the anatomy of the circulation, there are numerous examples to support the hypothesis, first suggested by Paget (1889), that some tissues provide more favour-
Metastatic carcinoma in a spinal meningioma


Metastatic carcinoma in a spinal meningioma

Anthony D. Hockley

*J Neurol Neurosurg Psychiatry* 1975 38: 695-697
doi: 10.1136/jnnp.38.7.695

Updated information and services can be found at:
http://jnnp.bmj.com/content/38/7/695

Email alerting service

These include:
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/