

Lay Summary

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Relating neuropathological features to clinical outcome in spinal ependymomas

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The spinal cord connects the brain to the rest of the body, passing messages through nerve fibres in the cord to control movement and relaying sensations back to the brain. Tumours of the spinal cord interfere with these functions causing serious problems including paralysis and incontinence. Ependymomas are a particular type of spinal cord tumour which can often be separated from the spinal cord and removed by surgery.

However, recovery after the operation can be variable. We have noted some cases in which the nerve fibres of the spinal cord run through, rather than round, the tumour.

We ask the question whether spinal cord function after removal of an ependymoma is worse if the nerve fibres run through the tumour and are therefore more likely to be affected by the surgery. We plan to review spinal ependymomas removed during the last 5 years in the Wessex Neurological Centre, Southampton, assess the relationship of the nerve fibres to the tumour using special stains, and relate the findings to spinal cord function after surgery. The findings may help to predict outcome after surgery for patients with spinal ependymomas.