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Cervical Spondylotic Radiculo Myelopathy

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All over the world patients with myelopathy due to cervical spine disorders, get worse over years. The pathology in cervical spine is caused by various mechanical compressions, pinching and ischemia of the nerve roots. The spinal cord gets compressed by osteophytes, distorted by abnormal angulations. Stretching particularly causes vascular narrowing leading to impaired blood circulations. The pathology in the spine which results in neurological deficits are the disc herniation, narrow spinal canal acquired or congenital, hyper mobility of the spine with impaired spinal cord function and finally the malalignment of the spine. Patients come with pain usually involving one or both arms. Certain lesions will show impaired functions like weakness and in long standing cases may have pyramidal tract signs. Pain is the cry of the nerves deprived of the blood supply. When patient complains pain in the arm you should think in these terms.

I have divided the cervical myelopathy into

(1) Arm hand and shoulder syndrome
(2) Weakness and atropy, where pathology involves the anterior horn cells of the spinal cord
(3) Myelopathy - in this series of 45 cases - 28% had localised upper part of the body lesions.

More than 50% of the 'shoulder hand and arm syndrome' had minimal pyramidal signs. Review of 1400 cases of anterior cervical operations revealed cervical myelopathy to be multilevel disease. In acute disc more than 50% are at one level, 1/3rd where at two level and 8% where at 3 level.

In cervical myelopathy due to spondylosis, most of them had three level lesions, half of them had two level and very few had single level lesions. The general philosophy has been to do anterior approach if it is one level lesion and in more than one level to do laminectomy. I have learnt that if the pathology is anterior, laminectomy is not the answer for cervical myelopathy. Removal of offending agent, osteophytes and offering ossious fusion, restores the normal movement of the spine. You all agree that the motion of the spine causes the trouble by development of osteophytes and subseqeunt narrowing of the canal. Hence the abnormal mobility should be eliminated at the site of disease.

I do not do laminectomies, I decompress anteriorly regardless of the number of levels. I decompress the canal and the root and fix the cervical spine. That is the definitive surgery for spondylosis. Among the 45 patients 90% of the cases symptoms were relieved and neurological status improved by the anterior approach. I identify the protruded disc by discography. Though Scovelley called Hardens of disc, even with osteophytes disc can degenerate and get into the canal to produce myelopathy, or radiculomyelopathy. Probably CT scan or MRI might be able to delineate this. But I do with discography and identify the protruded discs and removed.