yearly change of dura itself, or circulatory disturbance.

On the other hand we can not miss the effect that the dura which already developed pathological changes, has influence to some extent to the progress of spinal complaint.

A8. Radiological Studies of Cervical Disc Syndrome.

M. TSURU, T. TAKEDA and K. YADA

The radiological appearances of twenty-five cases of cervical disc syndrome, all confirmed by surgical operation, were analyzed. There were eight cases of disc hernias and seventeen spondylosis.

While the plain X-ray demonstrated narrowing of intervertebral space, posterior osteophytosis, or foraminal narrowing, or various combination of these in the most of the cases of cervical spondylosis, these abnormalities were rarely found among the disc hernias. The posterior osteophytosis and the foraminal narrowing were often noticed in multiple disc spaces in spondylosis.

The myelogram showed either complete block or large filling defect in most of the disc cases and anterior defect or deformity of root sleeves in the cases of spondylosis. There were several cases which demonstrated marked anterior defects by myelogram but failed to find posterior osteophytosis by plain X-ray.

Although the cervical spondylosis and the cervical disc hernias are considered to be the same group of diseases, there are significant differences in their radiological appearances. Also we would like to point out that plain X-ray often fails to demonstrate this type of pathological processes.

A9. Arnold-Chiari Malformation Associated with Spina Bifida.

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The 2nd Surg., Iwate Med. College

Three cases (females of 6, 10 years old and 2 months) of Arnold-Chiari malformation associated with spina bifida, platybasia and hydrocephalus were reported. One of them was combined with Dandy-Walker's syndrome.

Two of three cases were cured by suboccipital decompression. It is considered that all these malformations were caused by the traction of spinal cord with spina bifida.

The basal angle of 618 cases of various kinds of diseases were measured in X-ray photography of skull in order to investigate the relation between Arnold-Chiari malformation and platybasia.

Platybasia (over 150°) were found in 12% of all cases and high grade of platybasia (160° over) in 19 cases (3%), including all cases of Arnold-Chiari malformation.

A10. Some Changes of Autonomic Responses after the Orbital Undercutting in Man.

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The 1st Nation. Hospital

We are performing the orbital undercutting after Dr. Scoville on a certain patient of psychoneurotics.

Recently we studied autonomic responses before and after the operation in two cases who were 22 and 42 year old man, and had been suffered from agitation and temper.

The 22 year old man was a adrenergic hyperreactor to adrenalin, pilocarpine and atropine tests. After the operation, he became a normoreactor to the test. Also his urinary secretion has increased.

The 42 year old man showed higher skin temperature postoperatively. Also after the operation his mecholyl test showed normal type, but more blood pressure fall than before the operation.

These findings suggest that the orbital undercutting gives damage to the adrenergic cortical representation.