SPINA BIFIDA OCCULTA
(A case report with unilateral lesions)

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Spina bifida occulta may be defined as a congenital defect in the closure of the arch formed by the dorsal laminae of one or more spinal vertebrae, without herniation of neural tissue or meninges[1, 2]. The defect may be palpable as a depression which is sometimes covered by a dimple or a tuft of hair or a portwine mark of the overlying skin. It occurs most commonly in the lumbosacral region and is not infrequently associated with other congenital deformities. The most common malformation of the spinal cord and vertebral column is Spina bifida – in approximately 1 of every 1000 births. If considered in conjunction with its less obvious form, Spina bifida occulta, the actual incidence of this condition may be seen to be even higher[3]. Spina bifida occulta is present in 17% of all spines X-rayed[4]. It was found in 10.5% cases of Syringomyelia[5].

It is of considerable clinical importance, however, since it sometimes gives rise to symptoms the cause of which is not immediately evident. Trophic changes are conspicuous in some cases, and are rarely altogether lacking[4]. Children who learn to walk late, whose gait is clumsy or who have enuresis may have Spina bifida[3].

The majority of cases of Spina bifida occulta are asymptomatic but numerous symptomatic cases have been reported. Jelsma and Plotner after critically screening 6000 cases of low back pain, felt that 0.8% seemed due to Spina bifida occulta. Eighteen of their cases went to surgery. all with good results[1]. James and Lassman (1967) have found in many cases of Spina bifida occulta a variety of lesions of spinal cord and nerve roots[4].

The combination of hereditary spondylolisthesis and Spina bifida in a family in which the lesion was transmitted as an autosomal dominant through three generations was reported by Amuso and Mankin. (1967)[6]

Neuroschisis appears to be the leading manifestation of a common reaction to some injury primarily involving the embryonic ectoderm[7].

Currently the trend appears to be to minimise hereditary influences with direct implication in foetal and neonatal malformations. Spina bifida is regarded as a recessive inheritance but it is impossible to deny that the same end result could arise from an environmental disturbance[1].

This condition is to be differentiated from Tumour of the Cauda equina, Raynaud's disease T A O ; and ainhum. The long duration, often since birth, usual non progressive course, absence of pain ; absence of paroxysms of ischemia, and absence of reduction in the volume of arterial pulse, and rontgenographic evidence confirm the diagnosis[3, 4].

The present case was referred, suspected as a case of leprosy for its foot

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Received for Publication in February, 1971

lesions. A thorough examination revealed it to be a case of Spina bifida occulta and hence this report.

S, a Hindu girl aged 12 years, a daughter of a farmer, attended a leprosy clinic in November, 1970, for painless, nonhealing ulcers on the planter aspect of left great and little toes, for over a year. The father reported that about five years back, similar ulceration appeared on the planter aspect of the left 4th toe, which aggravated, the toenail was lost, and after that the toe became gangrenous and was lost, leaving behind an ulcer which took long to heal. The present lesions were also gradually spreading. There was no history of injury.

The father of the patient denied any similar complaint in parents. The patient has an elder brother, aged 18, and a sister aged 16, both reported to be healthy. There was no history of any major illness, during infancy of the patient. There was no history of retention, incontinence of urine, nocturnal enuresis, constipation or incontinence of faeces. The child did walk clumsily at first.

The girl appeared to be generally well built and well nourished, and of average intelligence.

Local examination revealed that the last two phalanges of the left 4th toe were absent. The left little toe appeared shorter. The nails of the left 2nd, 3rd, and the 5th toes had almost disappeared. So also the nail of the left great toe was much smaller. Fig. 1. Distal third of the left foot showed anaesthesia on both the planter and the dorsal aspects.

There was a tuft of coarse, shiny brown black hair about 4" long covering the lumbar part of the back. The skin in the region was not thick, puckered or adherent, nor was there any lump or pad of fat under the skin there. Fig 2.

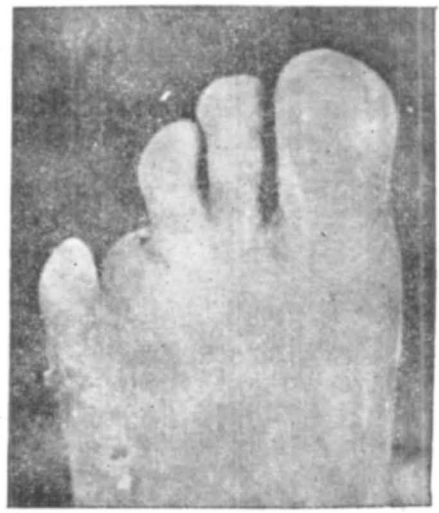

Fig. 1

Showing the absence of the 4th left toe and atrophic nails of the other toes

Fig. 2

Showing the hairtuft in the lumbosacral region and the wasted left lower limb

The vertebral column had a scoliosis towards right in midthoracic region. On tracing the spine below, there was felt a gap in between the sacroiliac joints. The buttocks and the posterior surfaces of the thighs had normal sensations. The left lower extremity appeared wasted, more so below the knee. The girth of the thighs, about 7.5 cms. above the patella was about 30 cms. on the right and 28.5 cms. on the left side. The calf, 7.5 cms. below the head of the fibula measured 22 cms. and 20.5 cms.

on the right and the left respectively. The feet did not show any coldness or cyanosis nor was there any history of it. The ankle jerk was absent on the left side. Left planter jerk could not be elicited. Other jerks were normal. There were no other naevi, sclerodermia, melanoleucoderma, hydrocephalus, microcephaly, harelip, cleft-palate, webbed fingers or talipes. The pulsations of femoral, posterior tibial and dorsalis pedis arteries appeared normal on both the sides. Posterior auricular, ulnar and lateral peroneal nerves were also normal on both the sides.

Urine examination did not show any albumin or sugar in it. Skinsnip from the dorsum of the left great toe was negative for A F B.

X-ray report of the lumbar spine read as follows :—

Spina bifida L4. Irregular development of L5. S1 hemivertebra, with no ossification in the right side. Fig. 3.

Myelography could not be done.

Fig. 3

Showing the defective vertebral column

Summary

Above is an account of Spina bifida occulta collected from the authoritative works.

A case report of Spina bifida occulta with hypertrichosis in lumbosacral region and unilateral lesions in the left lower extremity is presented.

Acknowledgment

I am thankful to Dr. P. V. Sane, and Dr. M. H. Saoji, for their interest and help in investigating this case.

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