

INTRODUCTION

The term spinal dysraphism refers to a group of congenital anomalies of the spine in which the midline structures fail to fuse (*Elwood YH. 1972 and Laurence KM. 1989*).

Multifactorial inheritance is strongly supported by environmental factors Family tendency declining risk with increasing distance of relatives and the fact that when one or more sibilings are affected there is a marked increase in the risk for subsequent sibilings to be affected (*McLone DG. 1995*).

If the lesion is confined to the bony posterior arches at one or more levels, it is termed spina bifida simple spina bifida of the lower lumbar spine is a common radiologic finding, especially in children and by itself carriers no significance, in contrast, bony spina bifida may accompany any of several complex anomalies involving the spinal cord, nerve roots, dura and even the pelvic visceral structures (*Sutton LN. 1994*).

Two distinct syndromes of spinal dysraphism are recognized :

I-Spina bifida cystica (synonames aperta, open neural tube defect) which includes the familiar myelomeningocele and characterized by herniation of elements through the skin as well as the bony defect and is obvious at birth (*Sutton LN. 1994*).

During the past 50 years incidence figures for open spina bifida (myelo and meningocele). Have been reported to be declining in many areas of the world (*Reigel DH. 1994*).

The goal of early operative care for newborn with an open neural tube defect is to preserve all neural tissue (*Humphrey's RP. 1996*).

2-Spina bifida occulta, (synonyms tethered cord syndrome, closed spinal neural tube defect) in which the underlying neural defect is masked by intact overlying skin and the external signs are often subtle, symptoms may not develop until late childhood or even adulthood as the result of spinal cord tethering. The spina bifida occulta includes diastematomyelia, lipomyelomeningocele, Hypertrophied Filum terminale and anterior sacral meningocele.

Spina bifida occulta is relatively common in United States of America in which incidence rates reported may be as high as 30 percent of the total number of cases of spinal dysraphism (*Reigel DH. 1994*).

In the past surgery was indicated only if neurological deterioration occurred with a bad postoperative improvement of neurological deficits.

Now the early recognition of these entities as important since neurologic function may be preserved only by early and appropriate surgical intervention (*Sutton LN. 1994*).

The recent experiments of the non invasive spectrophotometry done by Yamda and Coworkers supported the prophylactic value of detethering of the cord in early stages (*Yamada S. et al., 1985*).