

# **Chapter 8**



Pediatric Surgery

## **8.1 Hydrocephalus**

Hydrocephalus is a congenital disorder. There may be difficulties during normal vaginal delivery due large size of the head.

In 1970s, when these pictures were taken, ventriculo-caval or ventriculo-peritoneal shunts were the only options for a general surgeon to manage such cases.

To maintain one-way flow of CSF, Prof. Upadhyaya had developed his valve and incorporated in the shunts in those years.

(8.1a, 8.1b, 8.1c, 8.1d)



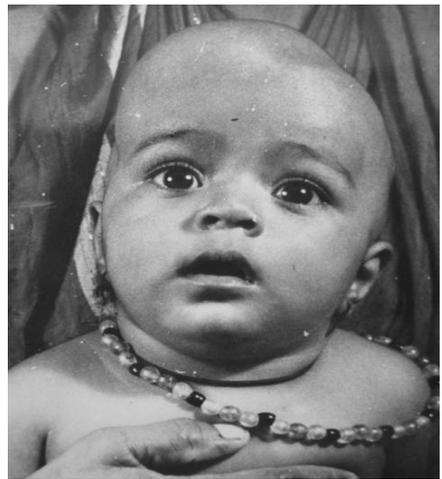
*8.1a*



*8.1b*



*8.1c*



*8.1d*

## **8.2 Congenital Neural Lesions**

Congenital lesions.

Encephalocele (8.2a, 8.2b).

Neural tumor of facial nerve (8.2c).

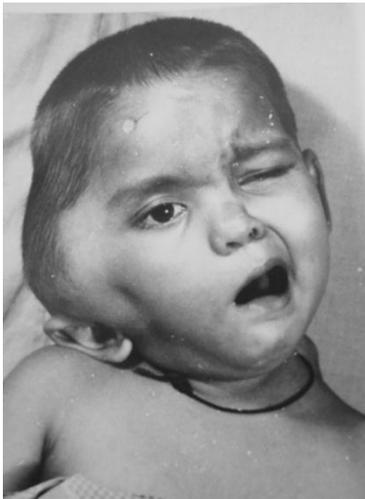
Chordoma; tumor of the remnant of notochord (8.2d).



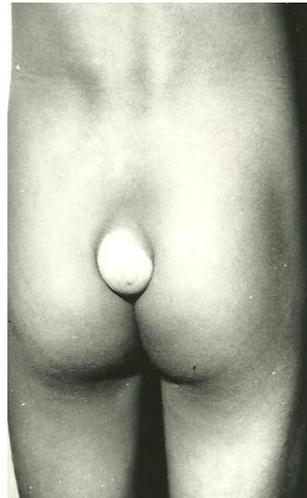
8.2a



8.2b



8.2c

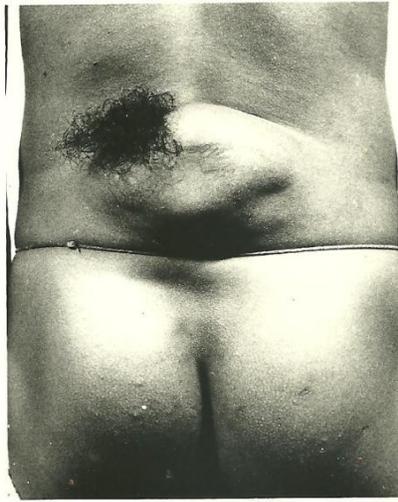


8.2d

## **8.3 Spina Bifida**

Spina bifida is a developmental disorder in which lower lumbo-sacral vertebrae are not fused. A tuft of hair or a deep dimple may indicate underlying spinabifida. Radiology can confirm. (8.3a, 8.3b)

This leads to bulging of meninges under the skin called meningocele (8.3c, 8.3d)



*8.3a*



*8.3b*



*8.3c*



*8.3d*

## 8.4 Congenital Spinal Lesions

Meningocele and meningo-myelocele.

Meningoceles in spina bifida are closed lesions. The meninges are so thin that the swellings may be transparent to light, and in sacral spines may show the nerves of 'Filumterminale' (8.4a, 8.4b).

Sometimes even the posterior part of the spinal cord is poorly developed leading to the exposure of spinal canal on the surface of the skin called meningo-myelocele.

This is serious because it can lead to ascending meningitis and encephalitis; hence must be closed as an emergency (8.4c, 8.4d).



**8.4a**



**8.4b**



**8.4c**



**8.4d**

## **8.5 Vascular Malformations**

Vascular malformations and haemangiomas of neck, face and gluteal regions.  
(8.5a, 8.5b, 8.5c, 8.5d)



*8.5a*



*8.5b*



*8.5c*



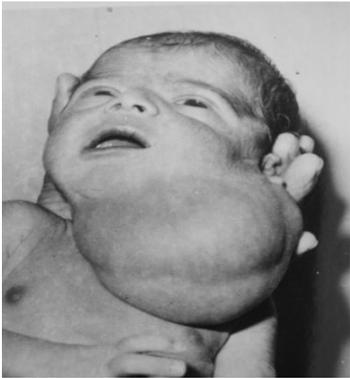
*8.5d*

## **8.6 Congenital Lesions**

Lymphatic malformation (previously called cystic hygroma) (8.6a, 8.6b).

Gastroschisis (Exposed abdominal contents) (8.6c).

Omphalocele (Peritoneal contents enclosed in a peritoneal sac, but no other coverings) (8.6d).



**8.6a**



**8.6b**



**8.6c**



**8.6d**

## **8.7 Hernias in Children**

Umbilical hernias (8.7a, 8.7b).

Abdominal contents protrude in a sac, covered by layers of the abdominal wall.

Lumbar hernias (8.7c, 8.7d).

Developmental weakness of muscles leads to herniation.



**8.7a**



**8.7b**



**8.7c**



**8.7d**

## **8.8 Congenital Lesions**

8.8a. Ano-rectal malformation.

8.8b. Anal stenosis.

8.8c. Vaginal Botyroid tumor (Rhabdomyosarcoma).



**8.8a**



**8.8b**



**8.8c**

## **8.9 Congenital Deformities**

Congenital deformities of hands and feet.

(8.9a, 8.9b).



*8.9a*



*8.9b*

## 8.10 Ascariasis

Ascariasis [8.10 a-d].

Worm infestations of GIT in children are very common in tropical countries. In my practice in India, I encountered many manifestations caused by roundworms. [Ascaris Lumbricoides].

A patient came with a history of passing roundworms through rectum, vomiting worms, and even worms coming out of nose. Mostly they were children.

Intestinal obstructions caused by these worms are quite common; I used to operate on at least one case every month.

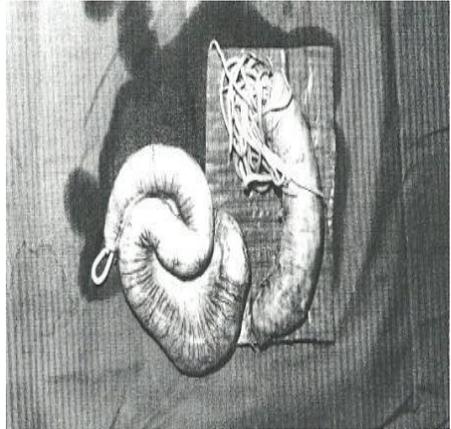
In most cases, history was suggestive. In cases with abdominal distension, simple plain x-ray and contrast study of GIT were helpful.

Explorations revealed bowel loops loaded with worms, leading to obstruction, even necrosis requiring resections.

The number of worms used to be in a thousand!



**8.10 a**



**8.10b**



**8.10 c**

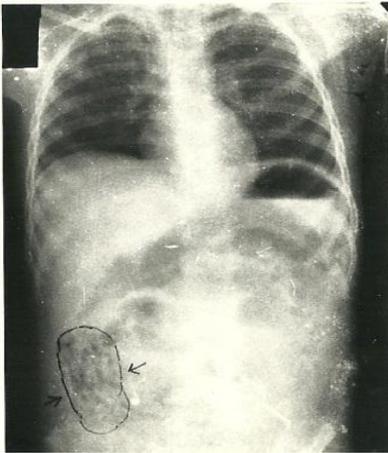


**8.10 d**

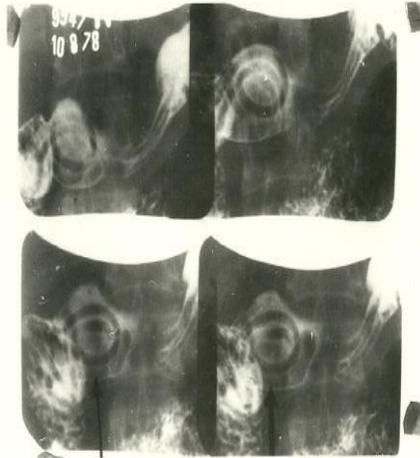
8.10 (e) shows a ball of entangled worms in right iliac fossa.

8.10 (e) and 8.10 (f) show worms in the small intestine in plain x-ray.

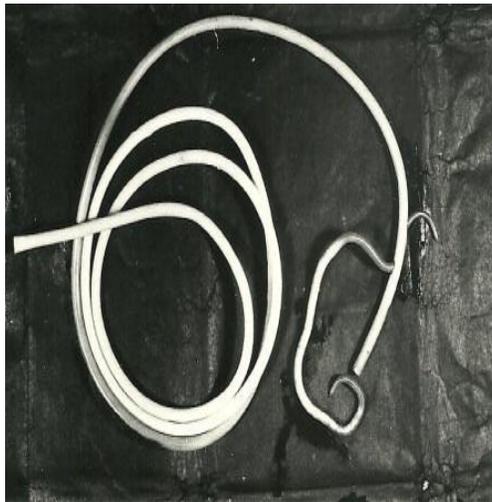
8.10 (g) shows a nasogastric tube blocked by a worm.



**8.10e**



**8.10f**



**8.10g**

