

# Hirschsprung's Disease (Congenital Mega-Colon)

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**Abstract:** *Hirschsprung's disease is the most common cause of "intestinal obstruction" in neonates. It is a disorder of gut caused due to congenital absence of ganglion cells in the lower intestine. According to some researches reveals that every 5000 birth one neonates having congenital mega colon. As compared female child male child more prone to get this disease. Also some researches revealed that this disease more common in whitish population as compared to blackish population. The disease affects the large intestine and the child faces problem in passing stools. The exact causes of the disease are unknown but sometimes it occurs due to genetic mutation.*<sup>4</sup>

**Keywords:** Congenital Mega-Colon, Hirschsprung's Disease, Neonate, Child

## 1. Introduction

Hirschsprunge' Disease is the disease of gastro-intestinal tract in neonate and children, in which the ganglion cells in absence in the sub mucosal and mesenteric plexus. So the child faces the problems in passing stool. Initial symptoms may be seen in neonate is failure to pass meconium (Fist stool after birth) after the you may have seen that the neonate abdomen will distended within 1 to 2 days because of obstruction.<sup>3</sup>

## 2. Definitions

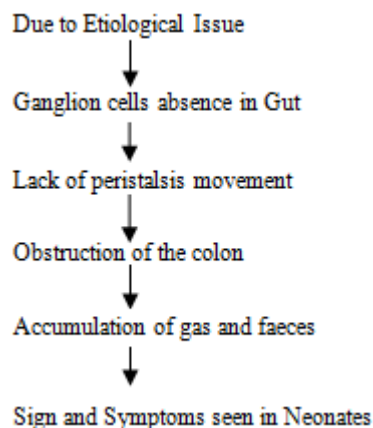
"Hirschsprung's disease or congenital mega colon the disease of lower gastro-intestinal tract in which the ganglion cells are absent in the lower intestine"<sup>1</sup>

"Hirschsprung's disease (Congenital Mega-colon) is the disease of lower intestine in neonate and child in which the nerve cells are absent in intestinal plexus"<sup>2</sup>

## 3. Causes

- Exactly causes are idiopathic
- Family history
- Genetic Mutation during Fertilization

## 4. Pathophysiology



## 5. Sign and Symptoms

### In Neonates

- Failure to pass meconium
- Abdominal distension
- Vomiting including bile
- Diarrhea

### In Children

- Constipation is the major sign and symptoms in child due to absence of ganglion cells.

## 6. Diagnostic Evaluation

- Failure to Pass Meconium may have suspected case of disease<sup>2</sup>
- when we are assess the patient abdomen we will feel collection of faeces in lower portion in abdomen<sup>1</sup>
- Rectal Examination – explosive leakage of faeces and gas<sup>2</sup>
- Biopsy – absence of ganglion cells<sup>4</sup>

## 7. Management

### Medical Management

- Provide isotonic enema
- Given stool softeners
- Administered grain diet like rice, juices etc<sup>5</sup>.

### Surgical Management

- **Swenson** – in this procedure the surgeon will cut the affected part and resect just above the anus
- **Duhamel** – in this procedure surgeon will retain and closed the anus and "aganglionic" colon proximal to it resect.
- **Sove's**– in this procedure the surgeon will retained anus but mucosa is removed.<sup>5</sup>

### Nursing Management

- **Pre-operative care** – physical examination of patient
- Abdominal Girth measurement
- Provide semi-fowlers position
- Provide isotonic enema.
- Provide psychological support to the parents
- Diet chart preparation and given to the parents

- **Post-Operative Care – Monitor vital sign**
- **Assess abdominal dressing**
- **Provide comfortable position to the child**
- **Maintain fluid and electrolyte balance**
- **Assess the bowel sound**
- **Colostomy care should be provide**

## References

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