



***SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS KALVI NAGAR, COIMBATORE-35
AFFILIATED TO Dr MGR UNIVERSITY, CHENNAI***

***DEPARTMENT OF OPERATION THEATRE AND
ANAESTHESIA TECHNOLOGY***

1st YEAR

SUBJECT: PATHOLOGY

TOPIC: MARASMUS





Introduction:

- Marasmus is one of the 3 forms of serious protein energy malnutrition
- These forms of protein energy malnutrition represent a group of pathologic conditions mainly in young children from developing countries.
- According to the world health organization 49% of the 10.4 million deaths occurring in children younger than 5 years in developing countries are associated with protein energy malnutrition



What is Marasmus?

- The term marasmus is derived from the greek marasmos, which means wasting
- It is a clinical syndrome resulting mainly under nutrition due to severe deficiency of protein, fat and carbohydrates inadequate calorie supply





Etiology:

- Dietary errors
- Infection
- Gastroenteritis
- Congenital anomalies
- Metabolic diseases
- Prematurity
- Some cases of mental retardation
- Low socio economic status
- Endocrine causes



Assessment of marasmus child/infant:

- Failure to thrive, loss of weight
- Loss of subcutaneous fat-measured at many parts of the body according to the degrees
- 1st degree-loss of subcutaneous fat in the abdominal wall
- 2nd degree-loss of subcutaneous fat over the buttocks and thighs
- 3rd degree-Subcutaneous fat in the abdomen wall and limbs and face
- Muscle wasting
- GIT disturbances as anorexia in advanced cases, hungry, constipation or diarrhoea or starvation diarrhoea



- Liability to infection
- Hypovolemia
- Weak feeble pulse, subnormal temperature, pulse rate
- Senile face and pallor

Complications:

- Intercurrent infection-broncho.pneumonia is the cause of death
- Gastroenteritis
- Hypothermia
- Hypoglycemia
- Joint deformation
- Severe weakness
- Organ failure



Investigations:

- Blood Analysis-WBC,electrolytes sugars,ketones,plasma proteins,normal or lowered
- Urine analysis-culture,sugar,ketones,ca,phosphate,aminoacids
- Stool analysis for parasites
- X ray for chest and heart
- Tuberculin test for TB
- ENT examinatio for otitis media



Treatment:

1.Prevention:

- Proper diet
- Encourage breast feeding up to weaning
- Proper weaning
- Proper vaccination as measles, TB
- Education regarding the cheap sources of balanced diet, family planning
- Proper followup of the growth rate
- Early treatment of defects or associated diseases



2. Curative treatment:

1. Proper dietary management:

- Adequate balanced feeding
- If there is vomiting or anorexia, give iv fluids or naso gastric tube feeding

2. Treatment of cause

3. Blood transfusion

4. Vitamins & minerals supplementation



THANK YOU