Dr.saad fawwaz

College of medicine

Al-Anbar University

FAILURE TO THRIVE

is defined as decelerated or arrested physical growth (height and weight measurements fall below the third percentile, or a downward change in growth across two major growth percentiles within ashort period) .

types;

It can be divided into organic & non-organic causes:-

Organic FTT; may include any chronic severe illness that affects any system of the body:

Renal : chronic renal failure f .renal tubular acidosis .chronic UTI and Diabetes insipidus .

GIT : chronic diarrhea , GERD , celiac desease ,PYLORIC STENOSIS ,malabsorption ,cleft lip and palate .

Cardiopulmonary diseases ; heart failre ,CHD , cystic fibrosis ,severe asthma .

Endocrine: hypothyroidism , hyperthyroidism, DM, GH deficiency

CNS ; cp , degenerative brain desease

Metabolic; inborn error of metabolism

Congenital conditions; chromosomal abn (turner syndrome), congenital infections .

Non-organic FTT ; include:-

- Inadequate diet because of poverty, or errors in food preparation .

- Parental cognitive or mental health problems.

- Child abuse or neglect, emotional deprivation.

• Classification of FTT according to severity:-

	Mild	Moderate	Severe
* Weight:	< 90%	< 75%	< 60%
*Height:	< 95%	< 90%	< 85%

(Note: This classification is depend on the percentage from the ideal body weight, height & wt/ht that are taken from appropriate growth charts (according to patient's age & sex) at the 50th percentile. Special growth charts are also available for patients with genetic syndromes e.g. Down & Turner; for premature infants, use either a special chart or the corrected age, for example; if a premature infant is delivered at 30 wk gestational age and the current postnatal age is 10 wk, then postconceptual age = 40 wk, this infant is cosidered in the same age as a fullterm newborn delivered at 40 wk. However, most VLBW infants will achieve weight catch-up with their peers during the 2nd yr and height by 2.5 yr of age.)

C.M. It ranges from just poor growth in comparison with their peers to manifestations similar to those of severe malnutrition . the weight is low and the hight is normal in acute , and both low in chronic cases .the OFC affected only in severe cases .

** In non organic FTT there may be signs of neglect e.g. diaper rash, unwashed skin, uncut and dirty fingernails, or unwashed clothing. A flattened occiput with hair loss may indicate that the infant has being unattended for prolonged periods. Other features may include delay in social and speech development, avoidance of eye contact, expressionless face .

**When malabsorption is the cause ,child will have steatorrhea ,passing of fowl bulky stools ,abdominal distension , muscle wasting and the other signs of malnutrition .

Approach to infant with FTT:-

The hx in any patient with FTT must include a detailed dietary hx with observation of maternal-child interaction. Physical examination should include all systems of body that may affect growth.

Measure periodically all growth parameters including; weight, length(or height if>2 years) & (weight/height) ratio to measure the degree of FTT. In malnutrition, weight is the 1st to be affected, followed by height, whereas head circumference is lastly affected when malnutrition is seriously affect brain growth.

Inv. CBP . GUE .GSE & S.Electrolytes are good initial tests. Other tests should be relevant to the findings in hx or exam.

Rx. Indications of hospitalization for patients with FTT include:-

For further investigations,

#severe malnutrition,

failure of home management & to evaluate the parent-child feeding interaction (especially when psychosocial FTT is suspected).

Organic causes of FTT should be treated according to the etiology of the organic illness a long with good nutrition.

Inorganic (Psychosocial) FTT should initially be treated at hospital by giving age-appropriate diet. If the infant start to gain weight, this is mostly due to Inorganic FTT. However, children with severe malnutrition must be re-fed carefully to avoid re-feeding syndrome (see later).

Goals of Rx are to obtain catch-up growth by gaining at least 30 g/day from the 1st wk & also to educate the mother about appropriate food. These children should also be given multivitamins as they usually have deficiency of iron, zinc, & vit D.