

In the name of God

Diarrhea-Nutrition

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معرفی بیمار

شیرخوار ۸ ماهه ای را به دلیل اسهال آبکی از حدود یک ماه قبل نزد شما آورده اند.

در این مدت چندین بار به پزشکان مختلف مراجعه و دارو دریافت کرده ولی بهتر نشده و حدود یک کیلو کاهش وزن داشته است.

با شیر مصنوعی تغذیه می شود . در طی این مدت چند بار شیر وی تعویض شده ولی بهبود نداشته است.

۱- تشخیص چیست؟

persistent diarrhea (PD)

۲- چه اقدامات تشخیصی انجام می دهید؟

PD is a clinical Dx.

۳- چگونه بیمار را درمان می کنید؟

Classification of diarrhea according to duration:

1- Acute <7 days

2- Prolonged >7<14 days

3- Persistent or chronic >14 days

Chronic or persistent?

Persistent diarrhea

1-Characteristics

2-Risk factors

3-Management

PD, Risk factors

1- Age

2- Formula feeding

3- Recurrent GE

4- Malnutrition

5-Imm.deficiency

6-Male(**boys**)

7 -Age of mother(**younger**)

Persistent diarrhea

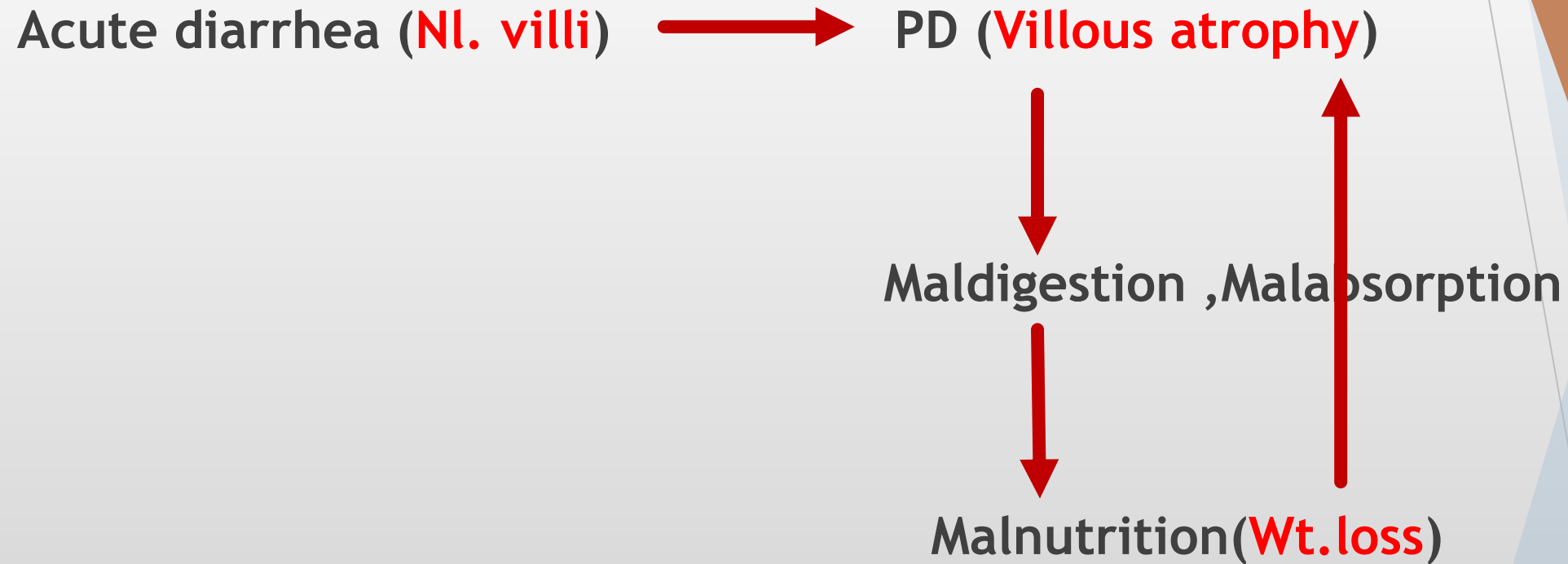
1-It is estimated that about **10%** of acute diarrhea becomes persistent.

2-It is the **most common** cause of diarrhea associated **malnutrition**.

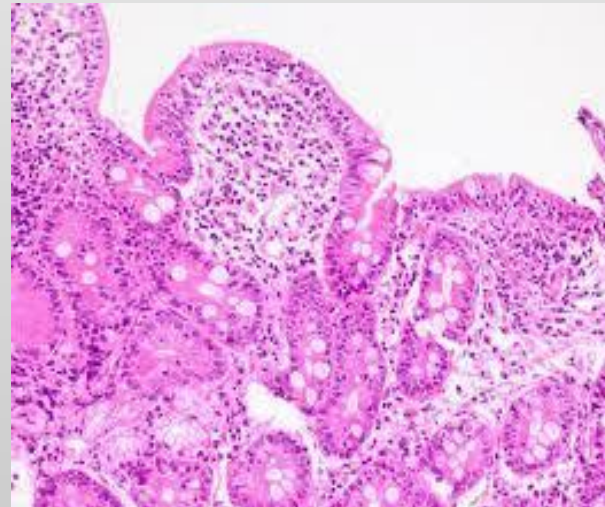
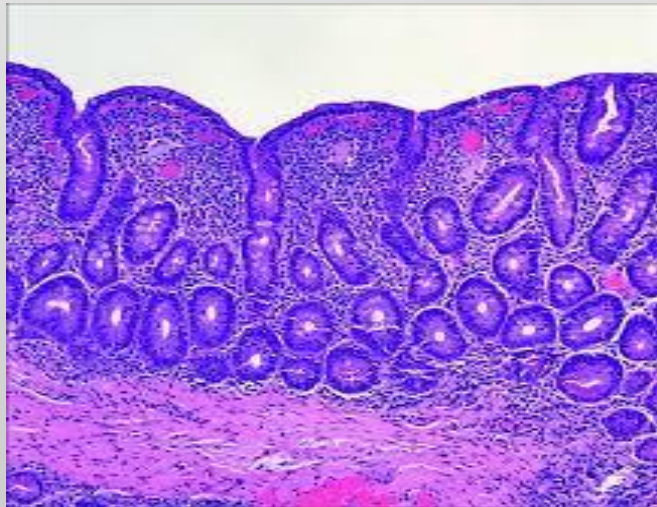
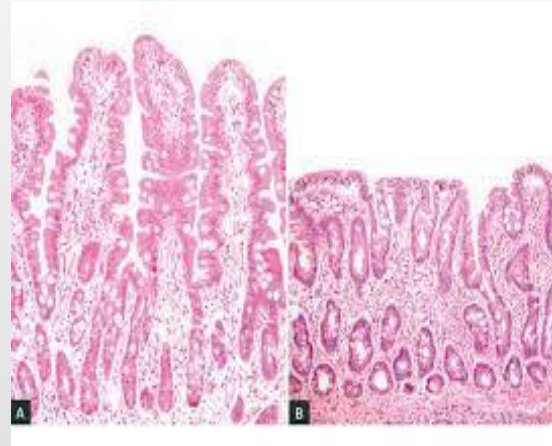
3- It is responsible for about **35%-55%** of all diarrhea associated **death**.

PD is the most common cause of **morbidity** and **mortality** secondary to diarrhea in children.

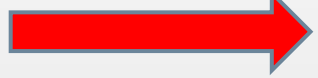
PD, Pathophysiology



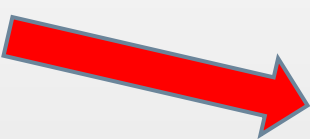
Normal mucosa and villous atrophy



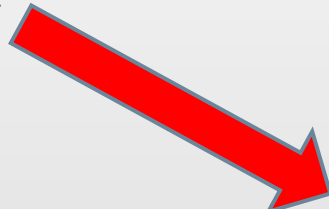
Course of acute, prolonged and PD



Acute



prolonged



PD



A benign and **reversible** condition



An **irreversible** process

Management

Acute or prolonged diarrhea:

1- *No significant mucosal damage*

2- *Fluid(water) loss: **Fluid therapy***

Persistent diarrhea:

1- *Has significant mucosal damage*

2- *Needs **Nutrition therapy***

Management

The objectives of management of PD is to restore **wt.gain** and normal **intestinal function**.

Management includes:

1-Supportive care

2-Nutritional therapy (Rehabilitation**)**

3-Drug therapy

Management

Dietary management(Nutrition therapy):

1-Enteral :

1-Oral , 2- By NG tube

2-Parenteral(TPN)

Nutrition therapy is the primary target of treatment in PD.

Management

Dietary management(Nutrition therapy):

- 1- It is essential to start oral feeding as soon as the child is rehydrated.*
- 2- Most children will respond to dietary management using locally available foods.*
- 3- **Breast feeding** should be continued.*
- 4- At first diet should be given in frequent and small amounts.*

Management

Dietary management(Nutrition therapy):

5- A low lactose or lactose free(LF) and HA formula are usually needed.

6- Eggs, chicken and yogurt based diets ,cereals , legumes, vegetable and oil are recommended.

7- There is no need to limit fat intake.

How long LF or HA formula?

Management

Supplementary vitamins and minerals:

All children with persistent diarrhea should receive supplementary multivitamins and minerals for **two weeks**.

These include:

1- Folate , 2-zinc , 3-Iron

4-copper , 5-magnesium , 6-vit A

WHO recommended providing **at least two times** the RDA for **two weeks**.

Management

Drug therapy:

1- Antibiotics

2-Cholestyramine

3-Creon

4-probiotics

5-IVIG: 300mg/kg , oral , single dose

Management

Treatment outcome:

The most important criterion for successful treatment is control of diarrhea and wt.gain.

Non-responders (treatment failure) or IDI:

Needs hospital admission and TPN.

With thanks

