

AING (ACUTE INFECTIOUS NON-BACTERIAL GASTROENTERITIS)

VIRUSES ARE A COMMON CAUSE OF FOOD POISONING MANY ARE DESCRIBED AS 'UNKNOWN AETIOLOGY'

AING IS AN UNPLEASANT BUT SELF-LIMITING CONDITION WITH:

**FEVER
VOMITING
MALAISE
DIARRHOEA**

AND IS MORE SERIOUS IN CHILDREN THAN ADULTS.

FOR THE WELL-NOURISHED DEATH IS UNCOMMON AND RE-HYDRATION IS THE REMEDY.

**TWO COMMON CAUSES ARE:
NORWALK-LIKE VIRUS
ROTAVIRUS**

NORWALK VIRUS:

HAS AN RNA GENOME BUT BECAUSE IT HAS NOT BEEN CULTURE IN TISSUES VERY LITTLE IS KNOWN ABOUT ITS REPLICATION STRATEGY.

HENCE SEVERAL VIRUSES ARE DESCRIBED AS BEING NORWALK-LIKE.

THE DISEASE IS SELF-LIMITING AND NO TREATMENT IS INDICATED, EXCEPT FOR REHYDRATION THERAPY.

SOURCES OF INFECTION: FOOD HANDLERS, SHELL FISH, PUBLIC WATER SUPPLIES, COMMON IN LTC, CRUISE LINERS, DAY CARE.

ROTAVIRUS:

WHEEL SHAPED MORPHOLOGY

HAS A dsRNA GENOME

THE REPLICATION CYCLE STARTS WITH ADSORPTION OF THE VIRUS TO THE CELL SURFACE AND ENTRY OF THE NUCLEOPROTEIN CORE

VIRUS CARRIES ITS OWN RNA-DEPENDENT RNA POLYMERASE

**THIS ALLOWS IT TO PRODUCE:
M-RNA FOR PROTEIN SYNTHESIS
DOUBLE STRAND RNA FOR NEW VIRAL PARTICLES.**

PATHOGENESIS:

ROTAVIRUSES KILL THE CELL AS THEY EXIT IT

INFECT THE TIP OF THE INTESTINAL VILLI.

THE SLOUGHING OF CELLS CAUSE THE VILLI TO SHRINK LOSING VALUABLE ABSORPTION SURFACES.

THIS LIMITS THE ABSORPTION OF WATER AND CONTRIBUTES TO THE DIARRHOEA.

THREE TYPES A, B, C.

**TYPE 'A' IS SEEN IN DAY CARE CENTRES, LTC
THE INFECTING DOSE IS SMALL SO POOR HAND HYGIENE CONTRIBUTES TO THE SPREAD**

OUTBREAKS ARE SEASONAL AND MORE COMMON IN THE LATE FALL

VACCINES:

THE ROTAVIRUS VACCINE IS PROBLEMATICAL

INITIALLY THE VACCINE DID NOT WORK VERY WELL.

THE DOSAGE WAS INCREASED BUT THIS GAVE RISE TO SERIOUS SIDE-EFFECTS.

THE MOST SERIOUS WAS INTESTINAL BLOCKAGE IN VACCINATED INFANTS

THE GENERAL CONCENSUS IS TO ONLY USE THE VACCINE IN COUNTRIES WHERE THE ROTAVIRUS KILLS CHILDREN.

ESSENTIALLY THIS MEANS DEVELOPING AND UNDER DEVELOPED COUNTRIES