SUMMARY AND CONCLUSION

Summary:

This study was conducted on 90 infants and young children; 80 cases with gastroenteritis and 10 of normal healthy control children. They were attending the Pediatric Outpatient Clinic of Benha University Hospital.

ELISA was done for both cases and control groups for detection of astrovirus antigen in their stools.

The results were summarized in the following points:

- There was no statistical significant difference (P> 0.05) between the patients and the control groups as regard the age, sex, residence maternal education, and types of feeding.
- The incidence of astrovirus infection among children was 5% by ELISA detection.
- The incidence of diarrhea among the rural children is more than that in urban.
- There was statistical significant difference between the types of infant feeding. The artificially fed infants were more susceptible for astrovirus infection.

Conclusion:

From the previous results, it could be concluded that:

- Breast milk has been shown to protect against infection and modify the severity of the illness.

- The vomiting and diarrhea in astrovirus infection is mild.
- Dehydration episode with astrovirus infection is absent.
- Astrovirus is more common to occur in children in warm seasons than in other seasons.
- The decrease in the incidence of astrovirus diarrhea with increasing age suggests the presence of acquired immunity following infection.

Recommendations:

- Further epidemiologic studies are needed to assess the burden of astrovirus diseases in outpatient and hospital setting. Detection of different astrovirus serotypes is necessary for astrovirus vaccine development.
- As the incidence of astrovirus diarrhea is more common to occur in infant aged less than 1 year, a candidate astrovirus vaccine would have to confer immunity very early in life.