SUMMARY AND CONCLUSION

Collection of fluid in the inraperitoneal space is termed ascites. The etiologic diagnosis of ascites is so important as regards malignant and non-malignant-related ascites. Cytology of the ascitic fluid had given 40-70% sensitivity in the differential diagnosis and followed by determination of ascitic fluid lactic dehydrogenase, carcinoembryonic antigen and total protein concentrations and all had the sensitivity below 90% in the differential diagnosis.

Our study aiming to determine the diagnostic value of ascitic fluid concentrations of fibronectin and cholesterol compared with that of total protein to differentiate between malignant and non-malignant-related ascites.

We had selected 36 cases from the Pediatrics Department, Benha Faculty of Medicine. Menoufia Liver Institute and the International Cancer Institute, Cairo and they were classified into two main groups: malignant and non-malignant each of 18 cases. The latter was subdivided into cirrhotics and non-cirrhotics. So, we have 3 groups; group I (the cirrhotics) 11 cases (7 males and 4 females with age ranges from 6 to 13 years), group II (non-cirrhotics non-malignant) 7 cases (4 males and 3 females with age ranges from 6-12 years) and

group III (malignant) of 18 cases (8 males and 10 females with age ranges from 10 to 16 years).

Samples were collected under complete sterile technique and preserved for determination of fibronectin(mg/100 ml), cholesterol (mg/100 ml) and total protein concentrations (gm/100 ml) in ascitic fluid, and the correlations between them and of each of them in different groups was obtained.

So, we conclude that cholesterol is sensitive by 100% as a diagnostic for malignant-related ascites and non exclusive because its specificity was zero% and fibronectin was sensitive by 72.3% as a diagnostic, exclusive (83.3%), predictive (87%) and efficient (77.3%) for malignant-related ascites. Both fibronectin and cholesterol are more correlated with each other in different groups than when correlated with total protein separately where the total protein sensitivity was 50%, exclusive (83.3%), predictive (81.3%) and efficient by 62% and so it is predictive, exclusive and has a poor diagnostic power compared to that of cholesterol and fibronectin concentrations in ascitic fluid.