Diagnostic value of ascitic fluid concentrations of fibronectin cholesterol and protein

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Collectionof fluid in the inraperitoneal space is termed ascites.The etiologicdiagnosis of ascites is so important as regards malignantand non-malignant related ascites. Cytologyof the ascitic fluid hadgiven 40-70% sensitivity in the differential diagnosis and followedbydetermination of ascitic fluid lactic dehydrogenase, carcinoembryonicantigen 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 fibronectln and cholesterol compared with that of total protein to differentiate between malignant and non-malignantrelated ascites. We had selected 36 cases from the Pediatrics Department, Benha Faculty of Medicine. Menoufia Liver Institute and theInternational Cancer Institute. Cairo and they were classified into twomain groups: malignant and non-malignant each of 18cases. The latterwas 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 13years),group II (non cirrhotics non-malignant)7 cases (4 males and 3 females with age ranges from 6-12 years) andgroup 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/loo mll, cholesterol (mg/ 100 ml) and total protein concentrations 19m/ 100 ml) in ascitic fluid, and the correlations between them and of each of them indifferent 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 adiagnostic, exclusive (83.3%), predictive (87%)and efficient (77.3%)formalignant-related ascites. Both fibronectin and cholesterol are morecorrelated with each other in differentgroups than when correlated with total protein separately where the total protein sensitivity was 50%exclusive (83.3%), predtcttve (81.3%)and efftcient by 62% and so it ispredictive, exclusive and has a poor diagnostic power compared to thatof cholesterol and fibronectin concentrations in ascitic fluid.