study of clinical value of carcinoembryonic antigen and fibonectin in ascitic fluid in diagnosis of malignant ascitis

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Ascites is common finding in many intra abdominal conditions. It is most often caused by chronic liver disease and/or malignant. Cytological examination of ascitic fluid showed a high incidence of false negative results in cases of malignant. Many ascitic fluid biochemical parameters such as carcinoembryonic antigen, fibronectin, albumin cholesterol and triglycerides, have been tried in the diagnosis of malignant ascites. This study involved two groups. The non malignant group included 20 patients with ascites due to liver cirrhosis (12 males and 8 females) with range of age from 38 to 59years. The malignant group included 22 patients with malignancy related ascites (3 males and 19 females) with age ranged from 18 to 71 years.All patients were subjected to the following :1-History taking including age, sex, duration of illness.2-Full clinical and radiological examination.3-Laboratory investigation including.-CEA in serum and ascitic fluid.4-Fibronectin in plasma and ascitic fluid.5-Serum and ascitic fluid albumin and albumin gradient.6-Serum and ascitic fluid cholesterol and triglycerides.Our results showed that :1- Serum and ascitic fluid CEA in malignant groups showed a significant increase as compared to nonmalignant group.2-Plasma and ascitic fluid fibronectin in malignant group was significantly increased as compared to non malignant group.3-Serum and ascitic -fluid albumin in malignant group showed a significant increase as compared to non malignant group. Conversely, albumin gradient in malignant group showed significant decrease as compared to non malignant group.4-Serum and ascitic fluid of both cholesterol and triglycerides were significantly increase in malignant group as compared to non malignant group.from the previous finding we can conclude that :1-Estimation of serum and ascitic fluid CEA, albumin gradient, cholesterol and triglycerides are useful in differentiating malignant from non-malignant group.2-Estimation of plasma and ascitic fluid fibronectin can be safely used to discriminate malignant from non-malignant group.3-The best markers among these different studied parameters which help in the differentiation between malignant and non-malignant groups are ascitic fluid albumin, plasma fibronectin and albumin gradient due to their high specificity and sensitivity. Ascitic fluid CEA fibronectin, cholesterol, triglycerides serum cholesterol triglycerides and serum CEA are more specific but less sensitive. On the other hand serum albumin is more sensitive but less specific.