TREATMENT OF BILE DUCT STONES BY EXTRACORPOREAL SHOCK WAVES LITHOTRIPSY (ESWL).

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Since June 1987, ESWL has been applied in 22 patients having endoscopically unremovable common bile duct (CBD: 15 cases) or intrahepatic stones (IHS: 5 cases). Shock waves (SW) were produced by an electromagnetic transducer (Siemens, LITHOSTAR). Fragmentation of stones was obtained in 100 % of the patients and further endoscopic extraction was performed. No side effect was noted after ESWL of CBDS but sepsis occurred in patients with IHS, easily treated by antibiotherapy. Conclusions: ESWL is a safe and effective method to facilitate endoscopic extraction for CBDS and IHS.

> A DOUBLE-BLIND PLACEBO CONTROLLED TRIAL OF EVENING PRIMROSE OIL (LINOLEIC AND GAMMA-LINOLENIC ACID) IN PRIMARY LIVER CANCER

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The metabolic intermediates of essential fatty acids exhibit definite cytostatic effects in cancer cell lines in vitro. This has been confirmed by other investigators. In two different experiments the cytostatic effect of G.L.A. on the Alexander hepatoma cell line was established. The proliferation of this cell type was consistently inhibited in vitro by gamma-linolenic acid (G.L.A.). Evening Primrose Oil (E.P.O.) contains 9% G.L.A. The complete lack of side-effects of E.P.O., a normal dietary substance and the dismal prognosis of African Primary Liver Cancer prompted a double-blind placebo controlled trial using E.P.O. (60% linoleic acid, 9% gamma-linolenic acid) as dietary supplement.

A total of 63 patients, all with histologically proven hepatoma were randomly selected to either 36 capsules of E.P.O. per day (containing 1,62g of G.L.A.) or to placebo.

RESULTS: There was a complete absence of side-effects. The treatment group generally

exhibited symptomatic improvement. No statistical difference in survival time between the two groups was shown (p=0,26). It is not uncommon for our patients to have tumours weighing up to 3kg. Administration of G.L.A. in excess of 1,62g daily should have more profound effects. It is suggested that an intravenous form of G.L.A. should achieve a more significant effect in this malignancy. Such a formulation will be available in the near future and further trials will then be run using this purified G.L.A. product.