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IMMUNOSUPPRESSANT AND ANTIOXIDANT THERAPIES IN THE PROFILAXIS OF INTESTINAL REPERFUSION INJURY.

A lot of evidence about the role of free radicals in the genesis of the reperfusion injury has been provided by the administration of antioxidants prior to the ischemia. The aim of this study is to test the ability of these drugs to decrease the intestinal reperfusion injury once the ischemia has been induced in order to parallel clinic situations.

MATERIAL AND METHODS. Under Nembutal anesthesia, ischemia was performed in female Sprague-Dawley rats (200 g) by clamping the Superior Mesenteric Artery for 120 min. The different drugs were administered diluted in physiologic serum (2 cc) at a low perfusion rate through the femoral vein, 15 min prior to removing the clamps. Seven groups of 20 animals have been considered: (I) Control (ischemia alone); (II) Serum; (III) Superoxide-dismutase (SOD) (7 mg/kg); (IV) Vitamin E (20 mg/kg); (V) Allopurinol (ALLO) (50 mg/kg); (VI) Folic acid (0.1 mg/kg); (VII) Cyclosporin A (CsA) (5 mg/kg, s.c.). The mortality rate (MR), the length of damaged intestine (LDI) and the mucosal damage index (MDI) were assessed.

RESULTS. Mortality Rate: (I) 75.5%; (II) 57.7%; (III) 40%; (IV) 55%; (V) 40%; (VI) 25%; (VII) 60%. **Length of Damaged Intestine:** (I) 30.9%; (II) 46.5%; (III) 24.7%; (IV) 39.5%; (V) 23.8%; (VI) 20.3%; (VII) 29%. **Mucosal Damage Index:** (I) 12.54; (II) 9.76; (III) 8.4; (IV) 10.15; (V) 11.54; (VI) 8.54; (VII) 10.54. Serum treatment slightly decreased the MR and the MDI, while frankly increasing the LDI ($p<0.01$). SOD, ALLO and Folic acid significantly decreased the MR, the LDI and the MDI. Vit. E did not modify the MR but it decreased the LDI and the MDI. CsA did not improve the MR nor the MDI, but it prevented the incresaed of the LDI induced by serum ($p<0.005$).

CONCLUSIONS. The clinical trial of antioxidant drugs for the prevention of intestinal reperfusion injury may be justified.

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ENTERAL COMPUTER MONITORING AND ENTERAL THERAPY IN GENERELISED PERITONITIS

The results of utilisation of a complex developed for enteral computer monitoring and improved enteral therapeutic regimen in 302 patients with severe generalised peritonitis (at its toxic and terminal stages) are reported.
Monitoring was performed by spectrum peripheral electroenterography (SPEG) and spectrum enteral impendansography (SEIG) technique. SPEG consisted of bioelectrical activity recordings from skin electrodes placed on the limbs in the frequency range 0.015-0.4 Hz, while SEIG method was performed by recording of electrical impendance from the electrode implanted into the intestinal wall within the same frequency range.
Spectrum analysis was done with utilisation of the algorithm of rapid Fourier transform on CM-1420 computer (PDP-11 version).
A complex of enteral therapy was performed in stages and included decompression of the intestine with nasointestinal 2 lumen probe, enteral perfusions with oxygenated solution in isobaric mode, regional intra-arterial therapy of the superior mesenteric artery areas with a combined pharmacologic stimulation of intestinal mortility by anticholinesterase and alpha-adrenoblocking drugs.
Utilisation of the treatment-and-diagnostic complex developed made it possible to lower mortality rate from 35.1% to 23.8%.

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THE NEGATIVE FINANCIAL IMPACT OF MANAGED CARE ON TREATMENT OF ACUTE APPENDICITIS IN A COMMUNITY HOSPITAL

Previous report by authors suggest that the newer methods of managed care for patients with acute appendicitis have had a negative effect on the quality of care. This study suggests that cost has also been negatively impacted. One hundred and seventy-one patients underwent appendectomy for acute appendicitis at a community hospital between January 1, 1986 and December 31, 1989. They were divided into two groups. Group A consisted of the 111 (65%) patients whose hospitalization or referral to a surgeon was prompt (within 12 hours of initial contact with a primary care physician). The remaining 60 (35%) patients whose hospitalization or referral was delayed more than 12 hours make up Group B. Patients with acute appendicitis in 1980 (37 patients) were promptly hospitalized and referred to a surgeon on 35 (92%) occasions. Current patients who were delayed more frequently underwent surgery for advanced appendicitis when compared to the group referred to surgeons promptly (68% vs 28%). These patients had an extended length of stay (11.5 days vs. 4.6 days). As a consequence, average hospital charges for delayed patients were triple those charges for promptly referred patients ($18,611 vs $6,062). With respect to patients with acute appendicitis, current policies that attempt to control access to specialists led to advanced stage of disease at operation and increased lengths of stay. Cost savings are not realized.

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Primary adenocarcinoma of the small intestine: a collective study of 80 case.

Primary small intestinal adenocarcinoma is rare: 0.5 to 5 p 1000 tumors of the intestinal tract. We collected 80 cases in 72 institutions observed in 10 years to analyze diagnostic, pathological, and prognostic data. Intestinal obstruction was the single most common symptom (50% of patients), followed by declining general health (45%), abdominal pain (43%), and anemia (41%). Nearly 1/3 of patients required emergency surgery: 16% of tumors were discovered at explorative celiotomy. Weight-loss, pain, and anemia were more common when the tumor was proximal whereas intestinal obstruction was more common when the tumor was ileal. Preoperative barium follow-through was positive in 82% of patients. 92 patients had a single tumor, 11% had metastatic deposits, and nearly 20% had surrounding organ involvement. 95% tumors were resected. Colonic resection was required in 20% of cases. Operative mortality and morbidity were 13 and 33%, respectively, significantly higher ($p<0.01$) when the tumor was ileal and operated on emergently. Serosal (80%), lymph node involvement (52%), and nondifferentiated tumors (40%) were associated (NS) with poorer prognosis. 5 year overall cumulative survival was 35%. Prognosis of small intestinal adenocarcinoma is not always catastrophic. Diagnostic awareness improves early diagnosis by barium follow-through.