Gastrointesinal

Pneumatosis cystoides intestinalis.

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Kirurgisk avdeling, Rjukan sykehus.

Patients with free intraperitoneal air usually undergo emergency surgery. Some of these patients will have no identifiable perforation, for instance those with pneumatosis cystoides intestinalis. This is a rare condition characterized by multiple intramural gas cysts in the gastrointestinal tract. The most common symptoms are meteorism, excessive flatulence, diarrhoea, abdominal pain, passage of mucus per rectum, or rectal bleeding. A case of pneumatosis cystoides intestinalsis is described. Plain abdominal radiographs showed distended bowel with free intraperitoneal air and intramural gas collections. At laparotomy, multiple intramural cysts were found, but no perforation or obstruction. The symptoms resolved after laparotomy, and the patient was discharged after a few days. The aetiology and pathogenesis of pneumatosis cystoides intestinalis are unknown, although deficient hydrogen metabolism and gasforming bacteria that penetrate the mucosal barrier may be involved. If needed, hyperbaric oxygen therapy is the treatment of choice. Surgery is indicated only in fulminant cases.

Pneumatosis cystoides intestinalis confined to the small intestine treated with hyperbaric oxygen.

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Pneumatosis cystoides intestinalis is a rare disease characterized by the presence of multiple intramural gas-filled cysts in the gastrointestinal tract. The etiology remains unknown, but the disease can present with profound disturbances of bowel function. We report the successful management of pneumatosis cystoides intestinalis of the small intestine with the use of hyperbaric oxygen.

Systemic sclerosis with various gastrointestinal problems including pneumoperitoneum, pneumatosis cystoides intestinalis and malabsorption syndrome.

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We describe here an experience of successful treatment of systemic sclerosis (SSc) complicated with various gastrointestinal (GI) problems including pneumoperitoneum, pneumatosis cystoides intestinalis and malabsorption syndrome. A 35-year-old female had developed selerodactyly since February, 1990. She had been treated under the diagnosis of SSc at other hospital. She had required several hospitalizations because of nausea, vomitting and abdominal distension, but her GI symptoms had gradually deteriorated. In April 1993, she was referred to our hospital and admitted for the treatment of her GI problems. On admission, she had systemic cutaneous sclerosis and marked abdominal distension without peritoneal signs was recognized. Chest and abdominal roentgenograms demonstrated massive free air under the diaphragm, marked dilation of small and large bowels, and multiple intestinal cysts (pneumatosis cystoides intestinalis ; PCI). We treated her GI problems with various modalities combined with medications, oxygen breathing, intravenous hyperalimentation and hyperbaric oxygen therapy. Pneumoperitoneum and PCI had disappeared after 8 courses of hyperbaric oxygen therapy and her GI symptoms had been well controled by intravenous hyper alimentation. Thereafter, she has been on intermittent parenteral nutrition through subcutaneous port inplantation. During the courses of this treatment, she developed an episode of Wernicke-Kolsakoff (W-K) syndrome which was considered to

associate with malabsorption syndrome. The W-K syndrome had recovered by intravenous administration of vitamin B1.

Spontaneous Clostridium septicum myonecrosis in congenital neutropaenia.

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Spontaneous Clostridium septicum myonecrosis is an uncommon disorder that has been described in association with malignancy, immunosuppression and neutropaenia. Typical clostridial myonecrosis develops without a visible portal of entry and mortality is high. The pathogenesis is not completely understood but the clostridia may gain access to the circulation via areas of ileo-caecal ulceration secondary to enterocolitis, antibiotics or neoplasms. A 5 year old boy with congenital neutropaenia presented with spontaneous Clostridium septicum myonecrosis in the thigh. Limb salvage was achieved using antibiotics, hyberbaric oxygenation and selective debridement. The portal of entry may have been the gastrointestinal tract as colonic ulceration may occur in neutropaenia, and pre-morbid clindamycin administration may have encouraged overgrowth of colonic clostridia.

The effect of hyperbaric oxygenation on the secretory, motor function and microcirculation of the stomach and duodenal walls in patients with duodenal ulcers.

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A total of 22 patients with duodenal ulcer were examined for secretory and motor functions, microcirculation of the gastroduodenal wall and changes in the stomach-duodenum interrelations under the influence of hyperbaric oxygenation. Of these, group I included 9 patients with active ulcer; group II 13 persons with a healing ulcer. To assess gastric and duodenal functions, use was made of pH-metry combined with the measurement of intraluminal pressure by "open catheters". Microcirculation of the gastroduodenal wall was estimated by the radiation method. The studies have shown that the patients with active ulcer treated by hyperbaric oxygenation manifested a decrease of motor activity of both stomach and duodenum, an improvement of acid-neutralizing function of the stomach, a reduction of the duration of duodenum acidification, a greater normalization of microcirculation in the duodenal wall than in the gastric wall. In the patients with healing ulcers, the duodenal motility returned to normal, the initially elevated gastric motility fell to normal, the acidification of the duodenal bulb declined, and the regional blood flow returned to normal. It may thus be concluded that the positive impact of hyperbaric oxygenation on gastroduodenal function was more pronounced in the patients with healing ulcers where a more considerable decrease of motor activity was not accompanied by duodenal motility suppression.