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abuse and 83% of the patients were male. A total of 171 of the patients agreed to complete the medical outcome study questionnaire—36-Item Short-Form Health Survey (SF-36)—which includes eight domains covering physical and mental health.

By comparison with a control group of 2,031 randomly selected Italian subjects, the patients showed negative mean scores for all eight domains of the SF-36 questionnaire, indicating that quality of life was substantially impaired in these individuals. This effect was most pronounced in younger patients and in females. Pancreatic pain was the only clinical factor that affected all physical and mental domains, although dilation of the Wirsung duct, decreased BMI, and diabetes were all significantly associated with impairment in at least one domain.

The study highlights the need to consider physical and mental aspects of quality of life in patients with chronic pancreatitis, with particular reference to pain but also taking into account alimentary and metabolic factors.

Original article Pezzilli R *et al.* (2005) Quality of life in patients with chronic pancreatitis. *Dig Liver Dis* **37:** 181–189

Liver disease in cystic fibrosis: prevalence and risk factors

Patients with cystic fibrosis are at increased risk of liver injury. This is caused by the obstruction of intrahepatic bile ducts by inspissated bile or abnormal mucoid secretions, among other mechanisms. The problem appears to be increasing as survival rates improve, but reports of the exact prevalence of liver disease in these patients vary widely. Lamireau and colleagues have addressed this question in their recent longitudinal study.

The authors reviewed the records of 241 patients diagnosed with cystic fibrosis at a single center in Canada. All underwent clinical and biological assessment every 3 months, and an ultrasound examination of the liver was performed annually. The median follow-up period was 9.8 years.

Liver disease was recorded in 85 patients (35%) during the study, and the median age at diagnosis was 3 years. Nineteen patients (8%) developed cirrhosis and five of these children required a liver transplant. The disease developed

mainly in the first decade of life; Kaplan-Meier analysis showed a prevalence of 18%, 29% and 41% at age 2, 5 and 12 years, respectively, and no increase from then on. Pancreatic insufficiency and a history of meconium ileus were independently associated with an increased prevalence of liver disease, whereas age at diagnosis of cystic fibrosis, gender, severity of pulmonary disease and genotype for cystic-fibrosis transmembrane conductance regulator were not.

Although half of the patients with liver disease were treated with ursodeoxycholic acid, this therapy was not randomly administered and so conclusions could not be drawn about its effectiveness. The authors propose that ursodeoxycholic acid treatment might be appropriate for the prevention of liver disease in patients with meconium ileus, and they call for long-term studies in this area.

Original article Lamireau T *et al.* (2005) Epidemiology of liver disease in cystic fibrosis: a longitudinal study. *J Hepatol* **41**: 920–925

Radiofrequency ablation as a treatment for nonresectable early-stage hepatocellular carcinoma

Of the treatment options available for patients with hepatocellular carcinoma (HCC), partial hepatectomy offers the greatest chance of a cure; however, it can only be used for patients with good liver function and favorable anatomy (<5% of cirrhotic HCC patients). Liver transplantation can be used to treat nonresectable HCC, but its use is limited by the scarcity of donor organs and tumor progression while on the waiting list. Another treatment modality is image-guided tumor ablation. The results of two new studies support the use of percutaneous image-guided radiofrequency ablation (RFA) as a first-line treatment for nonsurgical patients with early-stage HCC. It could also serve as a bridge to liver transplantation.

Lu et al. used retrospective histologic examination of explanted livers from patients who had undergone a single or double session of RFA to evaluate this technique. Treatment success was defined as the absence of any viable cancer cells from the treatment site on hematoxylin–eosin-stained liver sections.