CORRESPONDENCE

Chronic Pancreatitis—Definition, Etiology, Investigation and Treatment

by Prof. Dr. med. Julia Mayerle, PD Dr. med. Albrecht Hoffmeister, Prof. Dr. med. Heiko Witt, Prof. Dr. med. Markus M. Lerch, Prof. Dr. med. Joachim Mössner in volume 22/2013

Additions Required

The valid messages and recommendations from the S3 guideline on chronic pancreatitis require some additions, and some verification, in the section entitled "The treatment of pain."

Before initiating symptomatic medication or endoscopic or surgical pain treatment, a detailed analysis of the pain should be conducted in order to identify possible non-visceral (partial) causes of chronic upper abdominal pain, such as psychological disorders or musculoskeletal pain syndromes (1). In a proportion of patients with chronic pancreatitis, central pain is present that responds unsatisfactorily to surgical or endoscopic procedures (1).

The intensity of pain in chronic alcohol toxic pancreatitis correlates with the presence of affective disorders and further chronic pain syndromes but not with the CT results of chronic pancreatitis. Within a stepwise pain management approach, the first step should be to wean patients with chronic pancreatitis and substance dependency (alcohol, tobacco) off the substance they are misusing (2). The problem of misuse of prescribed opioids in substance-dependent persons deserves mentioning.

In a three-week randomized controlled study, pregabalin was superior to placebo regarding effective pain reduction (36% versus 24%) (3). Pregabalin was not listed among the options for drug therapy in the article.

Regarding Table 4 of the article: because of the half-lives of paracetamol (acetaminophen) and metamizole, the recommendation is for a minimum of 4 doses per day in patients with chronic pain. Levopromazine is a neuroleptic of low potency, not a tricyclic antidepressant. The use of neuroleptics in the treatment of chronic pain should be regarded critically because of limited data and because of the drugs' side effects.

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REFERENCES

1. Conwell DL, Vargo JJ, Zuccaro G, et al.: Role of differential neuroaxial blockade in the evaluation and management of pain in chronic pancreatitis. Am J Gastroenterol 2001; 96: 431–6.
2. Chauhan S, Forsmark CE: Pain management in chronic pancreatitis: A treatment algorithm. Best Pract Res Clin Gastroenterol 2010; 24: 323–35.
3. Olesen SS, Bouwense SA, Wilder-Smith OH, van Goor H, Drewes AM: Pregabalin reduces pain in patients with chronic pancreatitis in a randomized, controlled trial. Gastroenterology 2011; 141: 536–43.
4. Mayerle J, Hoffmeister A, Witt H, Lerch MM, Mössner J: Chronic pancreatitis—definition, etiology, investigation and treatment. Dtsch Arztebl Int 2013; 110(22): 387–93.

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Conflict of interest statement
PD Dr Häuser is the speaker of the working group on visceral pain (Arbeitskreis Viszerale Schmerzen) in the German Pain Society reg assoc.
He has received lecture honoraria from Abbott and Pfizer as well as a consulting fee from Daiichi Sankyo.

Protecting Organs Through Dietary Adjustments

The article references dietary treatment for chronic pancreatitis only in passing. The authors suggest cutting out alcohol and stopping smoking. It is certainly difficult to convince patients to comply with these recommendations, but this will not suffice in preventing or treating chronic pancreatitis.

In gastritis or ulcers, eradication of *Helicobacter* has successfully resulted in cure without a change in diet. In chronic pancreatitis, patients should protect their organs by means of dietary adjustments. In his book, "Klinik der Gegenwart", Professor Dr Ulrich Ritter introduces a diet sheet for the treatment of chronic pancreatitis, which aims to prevent or treat chronic pancreatitis in primary care by means of a special diet after hospital treatment (1).

Controlling fat intake is important, and beverages containing CO_2 and ice-cold drinks should be avoided. The same goes for ground bean coffee, as the roasting byproducts stimulate the digestive organs whether the coffee contains caffeine or not.

Hydrogenated fats should also be avoided. Such fats (for example, margarine) are produced industrially from plant oils. Hydrogenated fats require notably more bile to emulsify and more lipase for their breakdown than butter. Industrially produced baked goods and pastries are produced by using hydrogenated fats unless otherwise stated. Such goods are cheaper than baked goods made with butter and also have a longer lifespan (use-by date). The processing companies should be instructed to report whether their products contain hydrogenated fats.

In pancreatic failure, pancreatic enzyme is recommended. In order to protect the pancreas, proton pump inhibitors can be given on a temporary basis.

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REFERENCES

1. Ritter U: Krankheiten der Bauchspeicheldrüse. In: Bock H (eds).: Klinik der Gegenwart, München: Urban & Schwarzenberg 1981, 75–114.

2. Mayerle J, Hoffmeister A, Witt H, Lerch MM, Mössner J: Chronic pancreatitis—definition, etiology, investigation and treatment. Dtsch Arztebl Int 2013; 110(22): 387–93.

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In Reply:

We thank Dr Kuhnle for his interesting comments on dietary treatment in pancreatitis. It has, indeed, been shown that alcohol abstinence and successful smoking cessation notably slow the progression of chronic pancreatitis and therefore make therapeutic sense. Restrictive diet regimens have, however, completely lost their clinical relevance. It is neither appropriate to prescribe a low fat diet, nor has any benefit of a blockage of pancreatic secretion by means of proton pump inhibitors or specific diets been shown. The critical factor remains to assure adequate fat digestion by substituting sufficient lipase activity via pancreatic enzyme replacement therapy with pancreatin. Patients with chronic pancreatitis may eat whatever they like and tolerate, as long as adequate intake of fat-soluble vitamins and trace elements is guaranteed.

Assumptions about the health effects of coffee drinking have changed considerably in recent years. Coffee consumption has been found to not only have a beneficial effect on hepatic fibrosis, which has parallels with pancreatic fibrosis (1), but a recently published meta-analysis based on data from 678 000 individuals has shown that regular, especially heavy, coffee consumption can lower the risk of pancreatic cancer by 30% (2).

We also thank Dr Häuser from Saarbrücken for his comment, which is entirely correct, and states that levopromazine is a low-potency neuroleptic (antipsychotic) and not a tricyclic antidepressant. It is used empirically in chronic pancreatitis patients with pain, although this usage is not supported by results from controlled trials.

On the other hand, a recently published randomized controlled study investigated analgesic treatment in pancreatitis with pregabalin, a GABA analogue used for neuropathic pain (3), as correctly pointed out by Dr Häuser. This study by Olesen et al. only appeared after the guidelines had been completed and showed effective pain reduction only in one-third of patients with chronic pancreatitis. Since no comparison was done with classic pain treatment as recommended by the WHO scheme, the importance of pregabalin in the treatment of pancreatic pain remains presently unclear.

An evaluation of the differential cause of pain in pancreatitis, as suggested by Dr Häuser, makes complete sense and is recommended in the guideline. The misuse of opioids prescribed for pain in chronic pancreatitis is much rarer, in our opinion, than commonly assumed (4). Direct comparison with neighboring countries indicates that in Germany opioid analgesics tend to be prescribed too rarely, rather than too often. In chronic pancreatitis endoscopic or surgical therapeutic approaches for pain treatment should be considered whenever conservative pain treatment fails or in patients with suspected opioid misuse.

The current DGVS (*Deutsche Gesellschaft für Gastroenterologie, Verdauungs- und Stoffwechselkrankheiten e.V.*, German Society for Digestive and Metabolic Diseases) guideline reviews these approaches and provides clear recommendations in this regard (5). DOI: 10.3238/arztebl.2013.0687

REFERENCES

1. Gress TM, Müller-Pillasch F, Lerch MM, et al.: Balance of expression of genes coding for extracellular matrix proteins and extracellular matrix degrading proteases in chronic pancreatitis. Z Gastroenterol 1994; 32: 221–5.
2. Dong J, Zou J, Yu Xf: Coffee drinking and pancreatic cancer risk: A meta-analysis of cohort studies. World J Gastroenterol 2011; 17: 1204–10.
3. Olesen SS, Bouwense SA, Wilder-Smith OH, et al.: Pregabalin reduces pain in patients with chronic pancreatitis in a randomized, controlled trial. Gastroenterology 2011; 141: 536–43.
4. Keim V, Bauer N, Teich N, et al.: Clinical characterization of patients with hereditary pancreatitis and mutations in the cationic trypsinogen gene. Am J Med 2001; 111: 622–6.
5. Mayerle J, Hoffmeister A, Witt H, Lerch MM, Mössner J: Chronic pancreatitis—definition, etiology, investigation and treatment. Dtsch Arztebl Int 2013; 110(22): 387–93.

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Prof. Lerch has served as a paid consultant for Roche, Abbott, Falk, and Aptalis. He has received reimbursement of scientific meeting participation fees and travel expenses from Roche, Abbott, Menarini, and Falk. He has been paid by Roche, AstraZeneca, Reccordati, Menarini, Abbott, Falk, and Aptalis for preparing continuing medical education presentations. He has received financial support in an external-funding account for conducting clinical trials on behalf of AstraZeneca, Abbott, Menarini, Solvay, Roche, and Sanofi-Aventis. He has also received financial support in an external-funding account from AstraZeneca, Metanomics, Roche, Abbott, Solvay, and SanofiAventis for investigator initiated research projects.