

The study of chronic pancreatitis epidemiology - The big challenge

Knowledge regarding the etiology and pathogenesis of chronic pancreatitis has significantly increased during the last 20-25 years. While chronic pancreatitis was then classified as alcoholic or non-alcoholic, and alcohol drinking was virtually its only recognized cause, with around 20 % of chronic pancreatitis cases making up the mixed bag of non-alcoholic chronic pancreatitis, the understanding of this condition's etiopathogenic mechanisms has now greatly advanced. The TIGAR-O classification (1), which comprises multiple etiopathogenic factors, posits the existence of risk factors potentially leading to the development of the disease, with more than one factor potentially affecting any given patient simultaneously (for instance, toxic factors such as alcohol and tobacco together with genetic or environmental factors).

All these advances in the knowledge of both etiologic and pathogenic factors have not been accompanied by recent research on the frequency of this condition in Western countries, or studies analyzing the frequency of the various etiopathogenic factors. This lack of interest in the study of pancreatic diseases perhaps results from difficulties in obtaining funding for a condition lacking public and health industry support, and mistakenly considered with a low socio-economic burden.

Therefore, the existence of selected groups –though few in number– is most welcome, including those taking part in the research published in this issue of the *Spanish Journal of Gastroenterology*, which reports on a Spanish multicenter study of the frequency, causes, and manifestations of chronic pancreatitis (2).

The authors of this paper found a mean incidence of 5.5 cases per 10^5 inhabitants/year for chronic pancreatitis. This figure is low when compared to that reported by us in Cantabria (3) between 1981 and 1990, which was of 14 cases per 10^5 inhabitants/year, similar to that obtained by the team at Hospital Universitario de Araba, which takes part in the present multicenter study. Both figures are more consistent with results reported by other authors in times nearer our study period. In the Zurich area (4) an incidence of 10 cases per 10^5 inhabitants/year was reported for the period 1975-79, and the Copenhagen Pancreatitis Study found an incidence of 8.2 cases per 10^5 /year (5). The estimated prevalence in the Zurich area for 1973 was 4 cases per 10^5 inhabitants, and that found by the Copenhagen Pancreatitis Study was 13 cases per 10^5 inhabitants, whereas we found a prevalence of 18.3 cases per 10^5 inhabitants for 1991.

The low incidence of chronic pancreatitis in the study reported herein is remarkable when compared to studies performed from 40 to 20 years before, particularly considering the advances of diagnostic procedures. This may be –at least partly– due to the fact that the imaging techniques on which the authors of this paper based their diagnoses are highly sensitive and specific for advanced stages of the disease, and may overlook a non-negligible number of patients in earlier stages, where pain predominates in the absence of clear morphologic findings. The use of highly sensitive

Editorial

pancreatic function tests such as the secretin-CCK-Pz test, now abandoned because of its complexity but recoverable in association with endoscopic techniques, would help identify patients in earlier stages of their disease, thus avoiding missed diagnoses and therapeutic opportunities before calcification, steatorrhea, pseudocysts, or other complications develop, and allowing advice on healthier lifestyles or enzyme replacement therapy before malnutrition sets in.

In the upcoming future, endoscopic ultrasound-guided fine needle aspiration biopsy and pancreatic elastography may also help in the earlier diagnosis of chronic pancreatitis by allowing an earlier assessment of fibrosis extent.

On the other hand, the scarce consistency between prevalence and incidence as found in the aforementioned studies defies explanation. This fact may be attributed, at least partly, to a loss of patients who, after diagnosis, are referred to other health care areas and/or drop out of follow-up or die from comorbidities related to the unhealthy lifestyle commonly associated with these individuals (cardiovascular disease, cancer, COPD, etc.).

In summary, as pointed out by the authors in the discussion, epidemiologic studies are currently based on diagnostic methods that are only highly sensitive for advanced chronic pancreatitis stages, which renders invisible to such investigations a non-negligible amount of patients in early stages, where pain or acute pancreatitis episodes predominate, and where calcification, duct changes, diabetes and steatorrhea will remain absent for years to come. However, despite difficulties, this paper provides very useful information on the epidemiology of chronic pancreatitis in Spain, and helps to more accurately define the frequency of this condition and the resources its management requires.

Gonzalo de-las-Heras-Castaño

*Department of Digestive Diseases. Hospital Marqués de Valdecilla.
Santander, Cantabria. Spain*

REFERENCES

1. Etemad B, Whitcomb DC. Chronic pancreatitis: Diagnosis, classification, and new genetic developments. *Gastroenterology* 2001;120:682-707.
2. Domínguez-Muñoz JE, Lucendo A, Carballo LF, Tenías JM, Iglesias-García J. Estudio español multicéntrico de estimación de la prevalencia e incidencia de la pancreatitis crónica y sus complicaciones. *Rev Esp Enferm Dig* 2014;106: 239-45.
3. De las Heras G, Pons Romero F. Aspectos epidemiológicos y etiopatogénicos de la pancreatitis crónica alcohólica. *Rev Esp Enferm Dig* 1993;84:253-8.
4. Worning H. Chronic pancreatitis: Pathogenesis, natural history and conservative treatment. *Clin Gastroenterol* 1984;13:871-94.
5. Copenhagen Pancreatitis Study. An interim report for a prospective epidemiological multicentre study. *Scand J Gastroenterol* 1981;16:305-12.