**Les gastrites auto-immunes: actualités diagnostiques et thérapeutiques.**

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In the 1970s, chronic autoimmune gastritis (type B gastritis) was differentiated from chronic gastritis associated with Helicobacter Pylori (type A gastritis). Nowadays, the etiological classification of chronic atrophic gastritis is not so simple. Indeed, we know that *Helicobacter Pilory* (HP) can trigger an autoimmune gastric reaction by itself.

The natural history of gastric HP infection begins with the colonization and inflammation of antrum, which can then be extended to the gastric body. Classic chronic autoimmune gastritis, meanwhile, is often limited to the corpus gastric mucosa in the absence of HP. Interestingly; both type of gastritis can be associated with other autoimmune disease or poly-endocrinopathies.

The frequency of the association of gastritis and the autoimmune thyroiditis (autoimmune thyrogastric syndrome) was noticed as early as the 1960s. So far, any specific pathophysiological link could be identified. We have described, as well as other authors, familial forms of thyrogastric syndrome. If HP is also responsible for gastritis type B it is a subject of debate. When the gastric mucosa becomes atrophic there is no more HP, as the environment became hostile to the bacterium.

In both types of gastritis, the progression of autoimmune gastritis follows a cascade of well-defined histopathological lesions: chronic gastritis, chronic atrophic gastritis, intestinal metaplasia, dysplasia and neoplasia. The inflammatory reaction involves local infiltration of lymphocytes, polymorphonuclear and macrophages, but there is also a production of autoantibodies. Two of the best characterized autoantibodies are directed against parietal cells and recognize as Antigen K + / H + ATPase (APC) and intrinsic factor (Ab FI). In vitro, they are responsible for the destruction of parietal cells.

Then, these lesions extend towards the gastric body, determining a hypochlorhydria. This decrease in gastric secretion determines early malabsorption of micronutrients (divalent cations such as iron, magnesium, calcium, selenium) and a difficulty in extracting vitamin B12 is observed as well in the food bolus. Drug malabsorption can be observed such as the one of thyroxine.

A palette of serologic biomarkers can help to diagnose this asymptomatic gastritis phase. These are a decrease in the ratio of pepsinogen I/II, an increase in gastrin and the presence of APC and Ab FI and serology for HP. Due to molecular mimicry between HP and the gastric H/K ATPase, associated to an active infection by Helicobacter gastritis is available with or without antibodies to parietal and a normal or elevated gastrin levels.

The challenge for the clinician is to detect early gastric autoimmunity markers to avoid its complications. Indeed autoimmune gastritis may be associated with the development of neuroendocrine tumors (NET), gastric adenocarcinomas or even MALT lymphomas. Recent diagnostic tools complement the ability to detect autoimmune gastritis. Endoscopy using magnifying narrow band imaging (NBI) is an approach by endoscopic imaging of the gastric mucosa that can combine a substance of contrast and the blue light. Some studies have shown a good correlation and reproducibility between the observation of the mucosal lesions and their histological counterpart.

New histological approaches at employed to improve GAI stadification and to predict neoplasia risk. Thus, we can mention the score of OLGA (Operating Link for Gastritis Assessment). It is a histological measure (antrum score + score of the gastric body) severity and topographical atrophy of the mucosa. The OLGIM system (co-operative Link for Gastric Intestinal Metaplasia) is another score to measure the severity of metaplasia. This intestinal metaplasia is therefore considered as a risk factor for developing gastric cancer. Tisk is high when the score exceeds 3 on a scale of 5.

In support of the CAG and its complications, it should be mentioned that the early eradication of HP in infected patients, can also reduce the long-term risk of developing gastric adenocarcinoma. In infected patients harbouring a gastric Lymphoma of MALT type at an early stage, the eradication of HP joins often remission from lymphoma. In humans, eradication has no appreciable effects on gastric NETs, but a certain reversibility of carcinoid lesions was observed in Mongolian gerbils. Netazepide, a new treatment for gastric NETs, is a gastrin/CCK-2 receptor antagonist. Netazepide (YF476) demonstrated in the rodents and patients NETs gastric tumor reduction and a decrease in chormogranine A levels, when administered *per os*. Finally if the use of Proton pump inhibitors has expanded in patients CAG, some histological studies provide a doubt regarding their safety long term. A Cochrane review (five studies and 1705 patients), the Lotus Trial controlled study (266 patients followed over 5 years) and a few case reports of patients chronically treated with PPIs, suggested a *de novo* development of of hyperplasia micronodular, linear and diffuse cells entechromaphines, lesions that can be gastric NET precursors.

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