Double pylorus: strong evidence for the acquired etiology of this rare abnormality

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A 43-year-old patient with a history of peptic ulcer disease was admitted to the department with symptoms of gastrointestinal bleeding. Endoscopic examination of the stomach revealed two channels in the pylorus region, with a bleeding ulcer in one of the channels (Figure **1**). We treated the bleeding with a 1% adrenalin injection and proton pump inhibitors; following this, the *Helicobacter pylori* infection was treated with standard eradication therapy. Two years later the same patient was re-admitted with symptoms of peptic ulcer disease. This time, endoscopic examination of the stomach revealed that the fistula had disappeared, resulting in one large pylorus channel (Figure **2**).

There are conflicting data concerning the etiology of double pylorus, which is an unusual finding reported in 0.06%-0.4% of upper gastrointestinal endoscopic procedures. This abnormality is often associated with stomach and duodenum peptic ulcer disease, stomach malignancy, respiratory system diseases, chronic kidney disease, and diabetes mellitus [1]. There are also suggestions that the abnormality can be congenital, where patients show no signs of the aforementioned diseases and have histologically confirmed normal mucosa in both channels [2]. However, the accessory pyloric channel is probably created as a result of the penetration of the peptic ulcer from the stomach or duodenum. Penetration initiates adhesion of the walls of the stomach and duodenum and finally creates a connecting channel, which is re-epithelialized [3]. Usually the upper channel is a connection between the lesser curvature of the stomach and the duodenum bulb, but it can form an ulcer penetrating from the posterior part of the antrum to the third or fourth part of the duodenum [4]. Very often the accessory pylorus channel remains for life, but in some patients it closes or connects with the true pylorus to form one channel again, as in this patient.

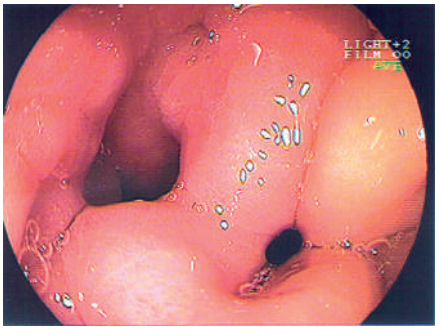

Figure **1** This endoscopic view of the prepyloric region shows the true pylorus with ulcer (on the left), and the accessory pyloric canal with fistulous communication to the duodenum (on the right).

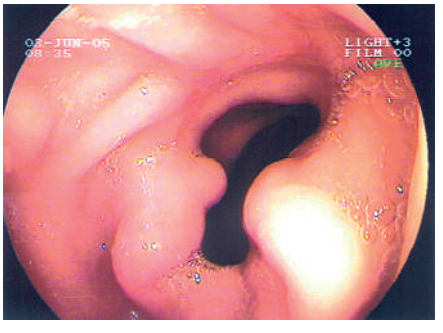

Figure **2** The prepyloric region 2 years later, showing a single large pylorus canal.

Endoscopy_UCTN_Code_CCL_1AB_2AD_3AC

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