



## LETTER TO THE EDITOR

## Dyspepsia and Wilkie syndrome, an uncommon cause, but often forgotten<sup>☆</sup>



### Dispepsia y síndrome de Wilkie, una causa poco frecuente, pero a menudo olvidada

Dear Editor,

In relation to the letter published in your journal last October by Ruiz Padilla et al.,<sup>1</sup> we submit this reflection, opened by the title of our missive: An uncommon but often forgotten cause of dyspepsia.

Wilkie's syndrome consists of the compression of the duodenum by the mesenteric artery. Other vascular syndromes have also been described, such as nutcracker syndrome and arcuate ligament syndrome.

Nutcracker syndrome consists of left renal vein compression between the aorta and the superior mesenteric artery. The syndrome causes a series of urological manifestations such as haematuria or microhaematuria and abdominal pain.

Arcuate ligament syndrome consists of coeliac trunk entrapment by the arcuate ligament. Its symptoms include abdominal pain and weight loss.

Routine examinations performed on these patients tend to be unsubstantial if the clinician does not suspect the condition.

The majority of patients undergo a gastroscopy, showing food remains, at best.

The clinical criteria for diagnosing Wilkie's syndrome are symptoms of abdominal pain or dyspepsia, a mesenteric artery angle of 25° or less and duodenal compression.

The syndrome was first described by Rokitanski<sup>2</sup> in the 19th century and later Wilkie published a series of 75 cases.<sup>3</sup>

This is without doubt an ample case study given how often the syndrome is diagnosed in daily clinical practice, and, if we consult the references, published cases are few and far between. The question is: Could we be under-diagnosing this syndrome? Might some cases be staying hidden amongst functional diseases?

<sup>☆</sup> Please cite this article as: Escartí Carbonell E, Cervera Delgado M. Dispepsia y síndrome de Wilkie, una causa poco frecuente, pero a menudo olvidada. Gastroenterol Hepatol. 2018;41:472–473.

The cases gathered below have been taken from a private surgery with a limited number of patients. They were gathered over a period of two years.

#### Case 1

45-year-old woman: abdominal pain, distension, gas. Examined by other specialists with a basic blood panel, *H. pylori* testing, gastroscopy, ultrasound, colonoscopy. A CT scan showed a mesenteric artery angle of under 20°.

#### Case 2

30-year-old woman seen for distension, gas and pain. The patient has been examined on several occasions, including by ourselves. Her symptoms have even prompted her to attend the Emergency Department. The results of all tests were negative. We requested a CT scan to measure the mesenteric artery angle, which was under 20°.

#### Case 3

59-year-old woman examined years ago for dyspepsia. Positive *H. pylori* test with failure of eradication. Endoscopy revealed gastric retention. Attended the surgery in 2015 with persistent symptoms. CT scan revealed a mesenteric artery angle of 11°.

#### Case 4

A 29-year-old woman attended the surgery with abdominal discomfort, distension, gas and a feeling of fullness. Her symptoms had been ongoing for a number of months and prompted her to see a general practitioner. No improvement with treatment and no *H. pylori* findings. CT scan revealed a mesenteric artery angle of 23°.

#### Case 5

24-year-old woman, who in January 2016 presented with abdominal pain, weight loss and digestive discomfort. Upon the initial examination, she had a positive breath test for *H. pylori*. Subjected to eradication treatment, which was successful, but symptoms showed little improvement. CT scan of the abdomen and pelvis requested: mesenteric artery angle of 11°.

## Case 6

27-year-old woman: heaviness, belching and reflux. ENT specialist diagnosed posterior laryngitis and prescribed omeprazole. Gastroscopy revealed bile reflux with a negative *H. pylori* test. Low-FODMAP diet made very little difference. CT scan of the abdomen and pelvis: mesenteric artery angle of 18°.

Treatment involves surgery and the intervention that attains the best outcome is a duodenojejunostomy.<sup>4</sup> However, many patients improve with prokinetic agents, antisecretory drugs and dietary and hygiene measures. Gaining body fat and weight is the goal. Our patients did not require surgery.

We believe that, in cases of dyspepsia with abdominal distension, pain and weight loss, and following routine investigations, if patients do not respond to conventional treatment, CT angiography or Doppler echocardiography should be included in the treatment protocol in order to identify the abdominal vascular structures.

## References

1. Ruiz Padilla FJ, Mostazo Torres J, Vílchez Jaimez M. Gran distensión gástrica en relación con síndrome de la arteria mesentérica superior o síndrome de Wilkie. *Gastroenterol Hepatol*. 2017;40:518–23.
2. Rokitsansky CV. *Lehrbuch der pathologische Anatomie*, 187. 3rd ed. Vienna: Braumuller; 1861. p. 3.
3. Wilkie D. Chronic duodenal ileus. *Br J Surgery*. 1921:201–54.
4. Fraser JD, St Peter SD, Hughes JH, Swain JM. Laparoscopic duodenojejunostomy for superior mesenteric artery syndrome. *JLS*. 2009;13:254–9.

Eduardo Escartí Carbonell\*, María Cervera Delgado

*Hospital Quirón, Valencia, Spain*

\*Corresponding author.

*E-mail addresses:* [eescarti@ono.com](mailto:eescarti@ono.com),  
[escarticarbonell@gmail.com](mailto:escarticarbonell@gmail.com) (E. Escartí Carbonell).