

# Solitary plasmacytoma extramedullary to duodenal level: an unusual case of intestinal occlusion

Manuel Lorenzo López Reboiro<sup>1</sup>, Inés Navarro Menéndez<sup>2</sup>, José López Castro<sup>1</sup>, Lucía Cid Conde<sup>3</sup>

<sup>1</sup>Internal Medicine Department. Hospital Comarcal de Monforte. SERGAS. Spain.

<sup>2</sup>Haematology Department. Hospital Comarcal de Monforte. SERGAS. Spain.

<sup>3</sup>Pharmacy Department. Complexo Hospitalario de Ourense. SERGAS. Spain.

## Abstract

Plasma cell neoplasms represent only 1-2% of hematological malignancies and intestinal plasmocytoma represents only 3%. Extramedullary plasmocytomas most commonly are located in upper airway and oral cavity; the gastrointestinal plasmocytoma only represents 12%, the most frequent being the gastric one. We present a brief report about an extramedullary solitary plasmocytoma at the intestinal level (duodenum).

**Palabras clave:** plasmocitoma extramedular. Oclusión intestinal. Neoplasia de células plasmáticas.

**Keywords:** Extramedullary plasmocytoma, intestinal occlusion, plasma cell neoplasms.

## Introduction

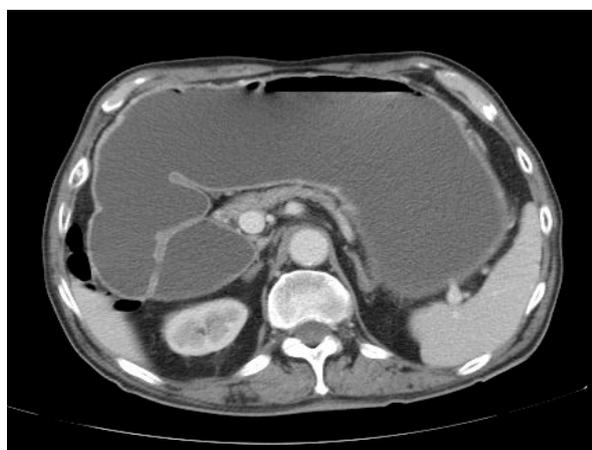
The plasma cell neoplasms represent only 1-2% of hematological malignancies and intestinal plasmocytoma represents only 3%. Extramedullary plasmocytomas are most frequently located in the upper airway and oral cavity. The gastrointestinal plasmocytoma only represents 12% and the most frequent is the gastric one. We present a brief report about a solitary plasmocytoma extramedullary at the intestinal level (duodenum).

## Clinical case

An 85-year-old patient, with a personal history of bladder and prostate neoplasia in complete remission who went to the emergency room presenting abdominal pain, nausea and vomiting of bilious content, with anorexia and weight loss of 10 kilograms in the last two months. In the physical exam, anorexia was highlighted. The analysis presents leukocytosis with neutrophilia, acute renal failure and hyperchloremic acidosis; interpreted in the context of diges-

tive losses. Abdominal ultrasound was performed, which caused thickening in the pylorus, and upper digestive endoscopy with biopsy extraction; they were informed anatomopathologically as chronic gastritis. The patient improved after hydration, tested tolerance to oral diet and was discharged with high doses of proton pump inhibitors. After four days, the patient returned to the emergency room due to digestive and abdominal aggravation. Abdominal computed axial tomography (CT) was performed (Fig 1, A. Upper panel: abdominal CT show signs of obstruction at the duodenum level), which showed signs of obstruction at the duodenal level, due to circumferential growth, and digestive echoendoscopy, showing stenosis at the level of the second portion of the duodenum (Fig 1, B. Lower panel: Digestive echoendoscopy confirm the stenosis at the second portion of the duodenum). Biopsies were performed at this level. The anatomopathological examination showed infiltration of post-positive plasma cells for CD138, CD79, CD43, BCL2, EMA and vimentin, with restriction for Kappa chains. Diagnosis of duodenal plasmocytoma was confirmed. The patient was referred to hema-

Fig. 1. A. Upper panel: abdominal CT show signs of obstruction at the duodenum level. B. Lower panel: Digestive echoendoscopy confirm the stenosis at the second portion of the duodenum



tology where a proteinogram was made in blood and urine, without evidence of monoclonal peak and extension study without evidence of other lesions. In view of the local extension of the tumor and the age of the patient, systemic treatment with bortezomib, melphalan and prednisone was decided upon with a good response until now.

## Discussion

The intestinal extramedullary plasmacytoma is a rare entity; the first case was published in 1947.<sup>1</sup> In the cases described in the literature it usually occurs in people older than 50 years, and with certain predominance in males<sup>2,3</sup>. The most common symptoms are dyspepsia, vomiting, abdominal pain and weight loss. There is a case that debuted as melenas<sup>3</sup>. The diagnosis is established by the association of clinical, laboratory and radiological examination in cases in which multiple myeloma can be excluded biopsy of the lesion. Definitive diagnosis is established by biopsy of the lesion, with markers positive for CD138 and light chains. The biopsy is more profitable if it is performed through surgery or endoscopic ultrasound. The treatment of choice is surgical resection and radiotherapy<sup>5</sup>. Radiation therapy is accepted as the standard treatment, even without a standardized dose and period, in

addition to the need for irradiation of regional lymph nodes. Surgery is first-line treatment and adjuvant chemotherapy can be used to prevent progression to multiple myeloma. In the present case chemotherapy was applied due to the tumor presentations. The prognosis is better than solitary bone plasmacytoma with a survival rate of 70% at 10 years. Despite the rarity of its location, the extramedullary plasmacytoma should be considered in the differential diagnosis of abdominal tumors.

## References

1. Angela Hefferman. Plasmacytoma of pancreas and duodenum causing acute intestinal obstruction. *The Lancet*. 1947; 249(6461): 910.
2. Caers J, Paiva B, Zamagni E, Leleu X, Bladé J, Kristinsson SY et al: Diagnosis, treatment, and response assessment in solitary plasmacytoma: updated recommendations from a European Expert Panel. *J Hematol Oncol*. 2018;11:10.
3. Lopes da Silva R. Extramedullary plasmacytoma of the small intestine: clinical features, diagnosis and treatment. *J Dig Dis*. 2012; 13(1): 10-8.
4. Tarek Ammar, Friederike Kreisel, Matthew A Ciorba. Primary Antral Duodenal Extramedullary Plasmacytoma Presenting with melena. *Clinical Gastroenterology and Hepatology*. 2010; 8:2002.
5. Richard Soutar, Helen Lucraf, Anthony Reece, et al. Guidelines on the diagnosis and management of solitary plasmacytoma of bone and solitary extramedullary plasmacytoma. *Clinical Oncology*. 2004; 16:405-413.