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DOI: 10.17235/reed.2024.10343/2024 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Rodríguez de Vera Guardiola Carlota, Reina Licona Lucía Alejandra, Alberca Corominas David, Paricio José Joaquín. Russell body esophagitis and Barrett's esophagus. Rev Esp Enferm Dig 2024. doi: 10.17235/reed.2024.10343/2024.

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Russell body esophagitis and Barrett's esophagus

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Keywords: Esophagitis. Russell body. Barrett's esophagus.

Dear Editor,

We present the case of an 85-year-old woman with a history of hypertension, type 2 diabetes, dyslipidemia and chronic renal failure who came to the emergency department for general malaise and asthenia. Laboratory tests showed anemia, so abdominal CT and gastroscopy were performed.

The gastroscopy showed two raised erythematous areas of metaplastic appearance in the distal esophagus, which were biopsied, and a prominent prepyloric fold in the gastric cavity, which was also biopsied.

Histologic study of the distal esophagus reveals a gastroesophageal junction mucosa with chronic lymphoplasmacytic inflammation with Russell bodies (Fig 1) and granulation tissue. Although initially there was no evidence of intestinal metaplasia, deeper levels of the submitted specimen revealed Barrett's esophagus without dysplasia. The gastric biopsy showed mild chronic inactive gastritis without the presence of H. pylori or enteric metaplasia.

Esophagitis with Russell bodies is a form of chronic inflammation of the esophageal mucosa containing plasma cells with accumulation of prominent intracytoplasmic Russell bodies¹. Russell bodies are thought to result from the cellular response to plasma cell overstimulation in chronic inflammation, resulting in condensed



immunoglobulin in dilated endoplasmic reticulum cisternae^{1,2}. These plasma cells are called Mott cells^{1,2}.

The pathogenesis is uncertain; an association with H.Pylori, inflammatory states and chronic lesions such as intestinal metaplasia and gastric mucosal atrophy among others have been suggested³.

Clinically they usually present with nonspecific gastrointestinal tract symptoms, with Russell bodies being incidental findings in biopsies. The gastric location is the most common location, being extremely rare in the esophagus. In the esophagus, in the review⁴ that documents the most cases, in most patients the presence of Russell bodies coexists with Barrett's esophagus.

For a correct differential diagnosis² it is necessary to rule out hematologic neoplasms as well as signet ring cell carcinoma. To this end, in complex cases, an immunohistochemical panel³ with epithelial markers (cytokeratins), plasma cell markers (CD 138) and light chains (kappa and lambda) can be used.

Although treatment of this entity is not well defined, it is proposed to eradicate H. Pylori in cases where it is present, and to prioritize the management of Barrett's esophagus³.

References

 Arshi J, Nguyen J, Yin F. Russell Body Gastroesophagitis Concurrent With Barrett's Esophagus. Anticancer Res. 2020 Jul;40(7):3991-3994. doi: 10.21873/anticanres.14392.
 PMID: 32620642.

2. González Sánchez H, Meijide Santos G, Fuente Díaz C, et al. Russell body duodenitis:
a rare condition. Rev Esp Enferm Dig. 2024 Feb 2. doi:
10.17235/reed.2024.10270/2024. Epub ahead of print. PMID: 38305680.

 Dhorajiya P, Mannan R. Russell Body Barrett's Esophagus. ACG Case Rep J. 2020 Apr 29;7(4):e00367. doi: 10.14309/crj.0000000000000367. PMID: 32548195; PMCID: PMC7224715.



4. Garcia GE Jr, Hiba MR, Staffetti J. Russell Body Esophagitis: A Possible Indication to Screen for Hematologic Malignancy. Cureus. 2022 Jun 24;14(6):e26291. doi: 10.7759/cureus.26291. PMID: 35770181; PMCID: PMC9236189.

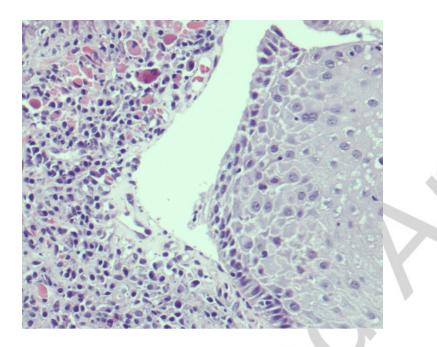


Fig 1: Esophageal mucosa in whose lamina propia a lymphoplasmacytic infiltrate with the presence of Russell cells is observed.