



Chemotherapy-Associated Pneumatosis Intestinalis

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A 65-year-old woman underwent surgery for squamous cell carcinoma of the left tonsil (pT2pN1M0) requiring adjuvant radiotherapy and chemotherapy (cisplatin). After the second cycle of chemotherapy, the patient arrived at the Emergency Department complaining of dysphagia, dyspnoea, and cervical subcutaneous emphysema, with unremarkable abdominal examination and laboratory tests. Contrast-enhanced cervico-thoraco-abdominal CT scan with oral and intravenous contrast (fig. 1 and 2) revealed cervical and thoracic subcutaneous emphysema, pneumomediastinum, pneumoperitoneum, retroperitoneum and pneumatization of the colon wall (*pneumatosis coli*), without

free intra-abdominal fluid.

Conservative treatment was established with corticosteroids, antibiotics and parenteral nutrition¹⁻². She presented progressive reduction of emphysema and radiological resolution of ectopic air. Oral diet was progressively reintroduced, and the patient was uneventful discharged from hospital³⁻⁴.

This case-report highlights the importance of considering the possibility of a benign chemotherapy-associated pneumatosis intestinalis to avoid unnecessary surgical intervention⁵.

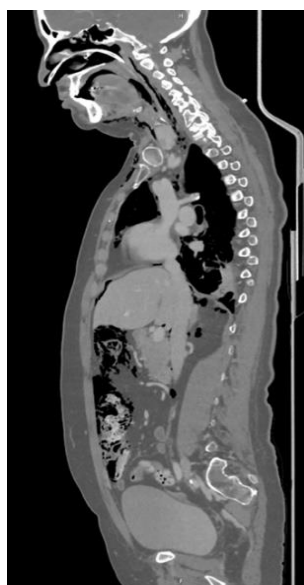


Fig 1. Sagittal planne of the CT scan, where it is revealed pneumomediastinum, pneumoperitoneum, and pneumatization of the colon wall.



Fig 2. Coronal planne of the CT scan, where it is revealed cervical and thoracic subcutaneous emphysema.

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REFERENCES

1. Vargas A, Pagés M, Buxó E. Pneumatosis intestinalis due to 5-fluorouracil chemotherapy. Gastroenterol Hepatol. 2016;39(10):672-3. <http://dx.doi.org/10.1016/j.gastrohep.2015.09.010>.

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2. de la Serna S, Luna A, de la Rosa H. Intestinal pneumatosis and pneumoperitoneum in an oncological scenario: a change of attitude. *Rev Esp Enferm Dig.* 2018;110(1):68-9. <http://dx.doi.org/10.17235/reed.2017.5333/2017>
3. Ooi SM. Pneumoperitoneum in a non-acute abdomen-pneumatosis custodies intestinal. *Sure Case Rep.* 2015; 1(1):44
4. Romano-Munive AF, Barreto-Zuñiga R. Pneumatosis custodies intestinalis. *Rev Esp Enferm Dig.* 2017; 109(1): 61.
5. Pizzala J, Pogorelsky V, González M, et al. Pneumatosis custodies intestinalis: a case report and review of the literature. *Acta Gastroenterol Latinoam.* 2014; 44(1): 48-51.