PICTURES IN DIGESTIVE PATHOLOGY

Unusual image of lanthanum carbonate in the abdominal radiograph

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CASE REPORT

A 73-year-old male with history of advanced chronic kidney disease on haemodialysis was admitted to the emergency room due to one week of diffuse abdominal pain and diarrhoea. He had no pathological products in the stools or fever. Physical examination was anodyne and blood tests were compatible with his underlying disease. The results of microbiological tests of stools were also negative. The abdominal X-ray revealed the presence of calcium density accumulations distributed homogeneously through the colon and appendix (Fig. 1).

The patient denied recent studies with iodinated contrast. Reviewing his current medical treatment, lanthanum carbonate was needed to control a secondary hypophosphatemia. The abdominal X-ray was repeated 48 hours after discontinuation of the drug and showed a change in the distribution of the radiopaque material (Fig. 2).

DISCUSSION

Lanthanum carbonate is a non-toxic non-absorbable heavy metal, which acts as a phosphate binder. In some cases, its accumulation in the digestive tract can result in radiopaque images, mimicking iodinated contrast. Abdominal discomfort

Fig. 1. Plein abdominal X-ray at hospitalization.

Fig. 2. Plein abdominal X-ray at hospital discharge.

and diarrhoea are both common adverse effects of lanthanum, but not necessarily associated with the radiological findings described above. In our case, symptoms were limited themselves and the drug was reintroduced.

REFERENCES

1. Tonelli M, Pannu N, Manns B. Oral Phosphate Binders in patients with Kidney Failure. *N Eng J Med* 2010;362:1312-24.
2. Díez B, Medrano M, Alonso A. Imagen radiológica del carbonato de lantano. *Nefrología* 2010;30:263-4.
3. Vrigneaud L, Lefèbe D, Daem AO, Lemaitre V. Aspects radiographiques de l'absorption digestive du carbonate de Lanthane. *Nephrol Ther* 2008;4:111-3.
4. Persy VP, Behets GJ, Bervoets AR, De Broe ME, D'Haese PC. Lanthanum: a safe phosphate binder. *Semin Dial* 2006;19:195-9.