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An atypical pleural effusion

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DESCRIPTION

A 51-year-old male presented with increasing dyspnoea, pleuritic chest pain and pain in the right shoulder tip. Clinical examination revealed stony dull percussion and absent breath sounds on the right mid and lower zones of the chest. He had no clinical evidence of heart failure or systemic volume overload, the main differential diagnoses in this case. His background history was significant for end stage renal disease due to focal segmental glomerulosclerosis with failed renal allograft. A Tenckhoff catheter had recently been sited and he had commenced peritoneal dialysis. Chest radiograph showed evidence of a large right pleural effusion (figure 1). A peritoneal dialysis drainage bag was immediately attached which drained 1.5 litres with

immediate symptomatic relief, followed by further intermittent drainages. Peritoneal dialysis was immediately discontinued and the patient was transitioned to haemodialysis. Follow-up chest radiograph showed resolution of the pleural effusion (figure 2). There was no evidence of a localised pleural process.

Dialysate leakage occurs in approximately 5% of chronic ambulatory peritoneal dialysis (CAPD) patients, is more commonly right sided and occurs due to the presence of a diaphragmatic hernia. Pleural aspiration will reveal a high glucose content in the fluid, due to the presence of dialysate. Peritoneal scintigraphy can be used for diagnosis.¹ Treatment options include pleural sclerotherapy (talc or tetracycline) or discontinuation of CAPD. A minority of patients

Figure 1 Plain chest radiograph showing large right sided pleural effusion with loss of cardiophrenic angle, and loss of lung fields over the right mid and lower zones.

Figure 2 Plain chest radiograph showing near complete resolution of large right sided pleural effusion.

may require thoracotomy.² This is an uncommon cause of a pleural effusion and we suggest vigilance in the peritoneal dialysis population.

Competing interests None.

Patient consent Obtained.

REFERENCES

1. **Tokmak H**, Mudun A, Türkmen C, *et al*. The role of peritoneal scintigraphy in the detection of continuous ambulatory peritoneal dialysis complications. *Ren Fail* 2006;**28**:709–13.
2. **Szeto CC**, Chow KM. Pathogenesis and management of hydrothorax complicating peritoneal dialysis. *Curr Opin Pulm Med* 2004;**10**:315–19.

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Please cite this article as follows (you will need to access the article online to obtain the date of publication).

Smyth A, Redahan L, Rahman T, Wall C, Mellotte GJ. An atypical pleural effusion. *BMJ Case Reports* 2010;10.1136/bcr.12.2009.2573, date of publication

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