



Figure 2 (a) and (b) Anatomopathological features: necrotic areas and hyphae with wall and vascular invasion.

in the case above. Differential diagnosis are appendicitis, volvulus or ovarian conditions. When DIOS is suspected, a CT scan can be performed usually showing proximal small-bowel dilatation and inspissated faecal material in the distal ileum; the absence of contrast material in terminal ileum is also suggestive. A water-soluble contrast enema can also be useful.

Regarding our case, diagnosis of DIOS was assumed as the clinical features and ultrasound findings were suggestive. But our patient was not just a CF patient but also a transplant recipient, who was under an intense immunosuppressive treatment.

It seems that immunosuppression can modify the normal intestinal flora, with bacterial and fungal overgrowth (namely *Aspergillus*), sometimes with transmural infarction and usually without evidence of systemic disease.⁶ The association of these two factors (DIOS and immunosuppression) probably explain the clinical findings, as both can be associated with changes in quality and quantity of the normal intestinal flora.

Initially, the patient started amphotericin with good tolerance. When *Aspergillus* was confirmed, it was switched to voriconazole.⁷ Besides the impossibility of drug monitoring of voriconazole,⁸ another question arose: the optimal duration of treatment. We decided to treat for 12 weeks after surgical resection and no lateral effects, intolerance or evidence of recurrence of the disease occurred.

The mortality rate of invasive aspergillosis in transplant recipients ranges from 65% to 92%, and 9.3 to 16.9% of all deaths in transplant recipients in the first year have been attributed to invasive aspergillosis.⁹ In the literature, we only found information about this diagnosis in necropsy samples, and there is also very little information about diagnosis, treatment or prophylaxis. These numbers are impressive, and they influenced our decision to share and discuss this case.

Conflicts of interest

The authors have no conflicts of interest to declare.

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