NEUROCYSTICERCOSIS IN SOLID ORGAN TRANSPLANTATION PATIENTS

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ABSTRACT

The neurocysticercosis is an important neurological infection. It can be seen in several tropical countries. The neurocysticercosis can affect both healthy people and patients. The organ transplant patient can also get neurocysticercosis. Similar to general case, the neurocysticercosis in organ transplant patients might present with neurological presentation. The practitioner should include neurocysticercosis in differential diagnosis of unexplained neurological episode in any patients with solid organ transplantation.

Keywords: Neurocysticercosis, Organ, Transplantation

Introduction

The food sanitation is the main prevention for this infection and the vaccine is still under development.¹ The cysticercosis usually presents as pathological cyst. The cystic lesion at any organ is the important finding and the lesion is usually asymptomatic accidentally detected. In the immunocompromised host, the existence of neurocysticercosis is very interesting. Here, the specific situation of neurocysticercosis in patients with underlying solid organ transplantation is analyzed and discussed. According to the literature search, there are only cases of neurocysticercosis in patients with underlying solid organ transplantation (2 liver transplantations and 1 renal transplantation).²⁻⁴ The main clinical presentation in all cases is seizure. The presumptive diagnosis is usually by brain imaging and the confirmation is by serological test or immunological test of cerebrospinal fluid. As a lesion in vital organ, no case received the surgical removal but medication against the parasite. The favorite outcome is usually derived and there is no adverse effect of graft due to antiparasitic drug medication. There is no evidence that the patient with solid organ transplantation has an increased risk of neurocysticercosis. Nevertheless, if the patient has previously diagnosis of neurocysticercosis, the relapse of the problem can be expected. Due to the good transportation in the present day, the migration of the patients with underlying transplantation from endemic area to non-endemic area is possible. The existence of neurocysticercosis in solid organ recipient can be seen anywhere and the practitioner should include neurocysticercosis in differential diagnosis of unexplained neurological episode in any patients with solid organ transplantation.⁴⁻⁵

Table 1. Some considerations on neurocysticercosis in solid organ transplantation patients.

Organs	Details
Liver	The neurocysticercosis is sporadically reported in patients with liver transplantation. ²⁻³ Barra Valencia noted that neurocysticercosis should be an important differential diagnosis of a transplant recipients originating from or traveling to endemic areas who have neurological problem and cystic lesions on neuroimaging investigations. ²
Kidney	Similar to that seen in patients with liver transplantation, cysticercosis is also sporadically seen in patients with renal transplantation. ⁴ For treatment, Peres et al. found that praziquantel was effective and result in cure. ⁴

Conclusion

Neurocysticercosis is an important differential diagnosis in any organ transplant patient with neurological problem.

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