

CMV infection and CMV disease in kidney transplant recipients – our experiences

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Cytomegalovirus is DNA virus, which belongs to Herpesviridae family. It's associated with one of the most serious (even life threatening) infection among kidney transplant recipients. The most endangered patients are CMV seronegative recipients with a CMV seropositive graft donor.

The CMV disease has direct and indirect effect to graft recipient. Direct effects include syndromes caused by cytopathic invasion itself, such as: hepatitis, pneumonia, colitis, graft dysfunction. Indirect effects include: high risk of graft rejection, increased risk of other opportunistic infections, increased risk of cardiac complications and others.

In our department we detected 10 cases of CMV infections among kidney transplant patients in the period from 05/2006–

05/2007. 4 out of them were diagnosed CMV positive without any clinical symptoms and became pre-emptive treated by valganciklovir. 4 patients had various symptoms of CMV disease and were successfully treated and discharged. 1 patient was admitted to our department with altered consciousness and symptoms of colitis, pneumonia, hepatitis, with 250.000.000 copies of DNA/ml by PCR method. Despite complex antiviral and antibiotic treatment he died on CMV sepsis.

CMV infection still remains one of the most common reasons of morbidity and mortality of kidney transplant recipients. It's necessary to define the risk group of patients and start with CMV prophylaxis to prevent symptomatic disease with all consequences.

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Ocular manifestations of neurofibromatosis 1 – m. Recklinghausen

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Abstract: Neurofibromatosis type 1 (NF 1) – morbus von Recklinghausen is an autosomal dominant phacomatosis with variable expression. The gene for NF 1 is located on chromosome 17q11.2. Incidence is 1 in 3500 live births. The diagnosis is made on the basis of clinical manifestations. Diagnosis requires the presence of 2 or more major criteria: 6 or more café au lait spots, 2 or more cutaneous neurofibromas or 1 plexiform neurofibroma, an optic nerve glioma, 2 or more iris Lisch nodules, axillary or inguinal freckling, bony lesions – pseudoarthrosis, sphenoid wing hypoplasia, or a first-degree relative with NF 1.

Key words: NF 1 – neurofibromatosis 1, optic nerve glioma.

Patients and methods

We reviewed group of 10 patients hospitalized at our Ophthalmology Department in the last ten years with the diagnosis of optic glioma. In 5 patients were diagnosed Recklinghausen disease, 1 patient has suspected NF 1. The first presenting sign in all patients was protrusion of the eye bulb. 5 patients underwent resection of the tumor which has proven to be pilocytic astrocytoma in all 5 cases.

Ocular features.

NF 1 may affect the iris, optic nerve, retina, bony and soft tissue of the orbit. Lisch nodules are proliferations of melanocytes and fibroblasts in the iris and have no affect the vision, onset is usually in a teenage years. Retinal hamartomas occur in

a small percent of patients. Orbital asymmetry is indicative of some degree of hypoplasia of the sphenoid bone, a progressive resorption of the sphenoid wing causing proptosis. Plexiform neurofibromas of the orbit are frequent, they grow along large peripheral and cranial nerves and plexuses and they extensively encompass the skin and neighbouring subcutaneous and deeper tissues. They look like subcutaneous tumors and the skin over plexiform neurofibroma is thickened and hyperpigmented with excessive hairiness.

Results

The treatment of these patients is mostly symptomatic. Surgery is currently the only treatment option for most of the lesion

in NF1 localised in orbit. The progression of the disease in these our patients were stopped .Chemotherapy is helpful to decrease tumor size. Radiation therapy can stimulate the grow of malignant tumors.

Discussion

Optic gliomas are the most frequently identified neoplasm in young patients with NF 1. These visual pathway tumors are found in 15% patients (in our set in 50% of children) and may lead to blindness. Histologically are a pilocytic astrocytomas. The great-

est risk for the development of optic pathway tumors in NF1 is during the first 6 years of life. The clinical behavior of optic gliomas is related to their anatomic extent. Isolated to the optic nerve are relatively benign, chiasmal involvement is worse.

Conclusion

The management of patients with NF1 require multidisciplinary clinic care, imaging studies and genetic counselling.

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