HYPOCALCEMIA BY PARATHYROID DYSFUNCTION IN CHILDREN AND ADOLESCENTS

INTRODUCTION

Dysfunction of the parathyroid gland is a rare cause of hypocalcemia. It may be caused by a deficiency or resistance to PTH. Generally symptomatic. It can be hereditary, congenital or acquired.

OBJECTIVE: Analysis of clinical, paraclinical, etiological and progressive children’s and adolescents

Hypocalcemia by parathyroid dysfunction

METHOD

This is a retrospective study of Hypocalcemia by parathyroid dysfunction observations in children and adolescents from 1980 to 2015.

All patients underwent a complete physical examination, laboratory tests (phosphocacique, PTH), morphological explorations (cervical and kidney ultrasound), ophthalmologic examination, cardiovascular assessment (ECG, heart Doppler), cerebral CT. Exploration was completed based on the patient context.

RESULTS

12 children (10 boys and 2 girls) are listed. Diagnostic Average age: 5 years (2-14) The discovery of circumstances convulsions (4 cases), growth retardation (4 cases), systematic research (3 cases), cataract (1 case), Clinical presentation was symptomatic in all cases (muscle spasms, tingling, cramps and tetany, defective enamel, lack of dental development). The assessment of complications found a cataract (n = 2) and calcifications of the basal ganglia (n: 3), intracranial hypertension (n: 1). In 25% of cases, hypoparathyroidism is familial. The mean serum calcium is 65 mg/l (60-70). The etiologies found were: idiopathic hypoparathyroidism (3 cases), postoperative hypoparathyroidism (3 cases a polyglandular autoimmune type I (3 cases), DiGeorge syndrome (one case), a pseudo hypoparathyroidism (2 cases).

Treatment with an alpha and calcium has improved symptoms in all cases.

DISCUSSION

Hypocalcemia by parathyroid dysfunction is a very rare disease of the child. It is characterized by low levels of calcium in the blood responsible for a very characteristic clinical picture.

Symptoms vary depending on the importance of hypocalcemia. Infants and small children the clinical picture is dramatic and can compromise vital prognosis (laryngospasm, seizures, intracranial hypertension ...). In the absence of adequate treatment, significant resonances are observed on growth velocity, skeletal and tooth enamel development. The risk of cataracts is important. The causes are dominated by hypoparathyroidism and autoimmune genetic causes.

Much more rarely, hypocalcemia can be related to a genetic resistance to PTH (Pseudohypoparathyroidism)

Whatever the etiology of hypocalcemia, the calcium and vitamin D therapy should be initiated promptly to preserve the functional and vital prognosis of the child.

CONCLUSION

The Hypocalcemia by parathyroid dysfunction is a rare disease in children. It may be due to varying etiologies. It is characterized by a symptom picture which can be grafted life-threatening. Its diagnosis and its treatment should be early and effective.