The presence of abdominal pain and hypercalcaemia in a patient with hypoparathyroidism should raise the suspicion of adrenal insufficiency which has to be investigated and treated on an emergency basis. Moreover, as the timing of the appearance of the individual disorders varies, a high level of suspicion regarding the development of associated endocrinopathies in particular adrenal failure, as well as informing parents of the possible symptoms is of utmost importance.

Case presentation

An 8 year old girl, who was known to have hypoparathyroidism and was treated with calcium and calcitriol, presented at the endocrinology department, complaining of fatigue and abdominal pain for five days, without vomiting, nor fever.

Physical examination

On physical examination she was pale with poor skin turgor, low normal blood pressure and mildly tachycardic.

Laboratory findings

The initial blood investigation revealed:
1. hypercalcaemia 11.6 mg/dl
2. hyponatremia 125 m Eq/l
3. hyperkalemia 5.8 m Eq/l

which suggested the possibility of adrenal failure

Further laboratory investigation demonstrated:
1. elevated ACTH levels (3465 pg/ml)
2. decreased cortisol production (5.84 μg/dl)
3. anti-adrenal antibodies were present.
4. PRA: 148.2 ng/ml/h

Which confirmed the diagnosis of adrenal failure. The patient was treated with hydrocortisone and she was rapidly improved.

The patient was followed regularly, treated with hydrocortisone, calcium and calcitriol, having normal electrolytes and low normal calcium. Eight months later she presented in our endocrinology department for her scheduled follow up and a candidiasis scalp lesion was detected.

Molecular genetic analysis is anticipated to confirm the diagnosis of APECED

Conclusion

The presence of abdominal pain and hypercalcaemia in a patient with hypoparathyroidism should raise the suspicion of adrenal insufficiency which has to be investigated and treated on an emergency basis. Moreover, as the timing of the appearance of the individual disorders varies, a high level of suspicion regarding the development of associated endocrinopathies in particular adrenal failure, as well as informing parents of the possible symptoms is of utmost importance.