

Acute management of Addisonian crisis – a quality improvement project

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Introduction

Adrenal crisis is a life-threatening emergency contributing to the excess mortality of patients with adrenal insufficiency. Studies in patients on chronic replacement therapy for adrenal insufficiency have revealed an incidence of 5–10 adrenal crises per 100 patient years and suggested a mortality rate from adrenal crisis of 0.5/100 patient years. Our aim was to improve acute management of Addisonian crisis in patients with adrenal insufficiency admitted to a large teaching hospital.

Methods

We carried out a retrospective review of the management of Addisonian crisis in 27 patients (age range 18–55) admitted between January and May 2018. We collected data on patients' hospital numbers from Medical Informatics and requested medical notes from Medical Records. Further to this we reviewed the case notes of each patient admitted with Addisonian crisis and their discharge letters and clinic letters. We revisited the patient journey from admission to discharge.

Results

Initial cycle showed guidelines were followed in the acute treatment of patients who presented with Addisonian crisis.

70% of patients were seen by the Endocrine team within 24 hours. Only a few patients were made aware of sick day rules before discharge. Following the first cycle we disseminated our recommendations about the importance of sick day rules via emails and posters. We delivered teaching to all healthcare staff who were involved in the acute care of patients with Addisonian crisis. Following a plan, do, study, act (PDSA) cycle and interventions we noted dramatic improvement in the results. More than 80% of patients were reviewed within 24 hours. Sick day rules were communicated to 83% of the patients in the second cycle as compared to 7% in the first cycle.

Conclusion

Further improvement in education regarding sick day rules are required to achieve a 100% result. This needs to be done consistently by all medical professionals to reduce mortality and morbidity. With regular PDSA cycles we intend to further reduce unnecessary hospital admissions and reduce the associated costs in various NHS hospitals. ■

Conflicts of interest

None declared.