

Case Report: Managing Psychosis, Alcohol Withdrawal and Refeeding Syndrome in an Acute Psychiatric Ward

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Introduction

Refeeding Syndrome is a potentially lethal shift in fluid and electrolyte imbalance that results when malnourished patients are refed. A common but often missed complication of eating disorders, refeeding syndrome occurs in other psychiatric disorders and may present with treatment challenges. Initiating antipsychotic medications in patients with psychosis can worsen the risk of refeeding syndrome.

Case Summary

A 36 year old woman was admitted with persecutory delusions and aggressive behaviour. She had previously been diagnosed with persistent delusional disorder and was known to abuse alcohol.

Nutritional status was poor; Body Mass Index at admission was 17.9. Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar) score was 22. Electrocardiogram tracing showed sinus rhythm and a corrected QT interval of 475ms. Admission blood tests showed low haemoglobin level (82 g/l), thrombocytopenia, mild hypophosphatemia, mild hypokalaemia and deranged liver enzymes.

She was commenced on alcohol detoxification. Antipsychotic medication regularly used on previous admissions was withheld despite her agitated behaviour. She requested and was given Ensure in addition to her regular meals.

Over the next 48 hours, in addition to ongoing delusional beliefs, she exhibited confusion, irritability, dizziness and generalised weakness. Repeat blood work showed severe hypophosphatemia, hypomagnesemia and hypokalaemia. Refeeding syndrome was suspected and a referral made to an acute hospital for further management..

Outcome

Despite some initial resistance, this patient was eventually accepted for treatment in the acute hospital setting. She had electrolyte replacement with intravenous phosphate, magnesium and potassium. She also had an intravenous iron infusion in view of iron deficiency anaemia.

She had a dietician review recommending weekly weight and nutrition monitoring. She returned to the ward where oral vitamin supplements continued. Her delusional beliefs, agitation and aggression spontaneously resolved.

Lesson Learnt/Conclusion

Patients with alcohol dependence, eating disorders and uncontrolled diabetes are at risk of refeeding syndrome. Prescribing psychotropic medications must be actively avoided as they can contribute to the complications of refeeding syndrome which includes arrhythmias, hypotension and seizures. Electrolytes may be deranged or normal at admission; serial monitoring is required to detect emerging imbalances. Refeeding following malnutrition or starvation in an acute psychiatric inpatient setting would benefit from the input of a dietician.