Milton Keynes University Hospital NHS Foundation Trust

Management 12– 24 hours

By 24 hours the ketonaemia and acidosis should have resolved

Aim:

Ensure that the clinical and biochemical parameters are improving or have normalised.

Continue IV fluids if the patient is not eating and drinking.

If the patient is not eating and drinking and there is no ketonaemia move to a VRIII as per local guidelines

Re-assess for complications of treatment e.g. fluid overload, cerebral oedema.

Continue to treat any precipitating factors, as necessary.

Transfer to subcutaneous insulin if the patient is seating and drinking normally.

ACTION 1

MONITORING Re-assess patient, monitor vital signs

If the patient is not improving, then seek senior advice.

ACTION 2 Review biochemical and metabolic parameters

At 12 hours check the venous pH, bicarbonate, potassium, as well as blood ketones and glucose.

IF DKA RESOLVED

Resolution of DKA is defined as ketones less than 0.6mmol/L and
venous pH over 7.3.

IF *NOT* DKA RESOLVED

Follow guidance in actions between 60 - 6hours
Review treatment targets
Assess resolution of DKA

If ketones and glucose are not falling as expected always check the insulin infusion pump is working and connected and that the correct insulin residual volume is present (to check for pump malfunction).

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NB: Do not rely on bicarbonate alone to assess the resolution of DKA at this point due to the possible hyperchloraemia secondary to high volumes of 0.9% sodium chloride solution. The hyperchloraemic acidosis will lower the bicarbonate and thus lead to difficulty is assessing whether the ketosis has resolved. The hyperchloraemic acidosis may cause renal vasoconstriction and be a cause of oliguria.

Patients should be eating and drinking and back on normal insulin. If this expectation is not met within this time it is important to identify and treat the reasons for the failure to respond to treatment.
It is unusual for DKA not to have resolved by 24 hours with appropriate treatment and requires senior and specialist input.

Specialist diabetes team input is important to allow re-education, to reduce the chance of recurrence, and to facilitate appropriate follow up.

Created 29/03/2021.

Diabetic Inpatient Nursing Team. Review Due March 2023