

Diabetes DKA

LEARNERS	
PROGRAMME/COURSE/SCENARIO	Diabetes
SPECIALITY	Medical
ROLE(S)	Keep staff in normal role
COMPOSITION: UNI/MULTI/INTERPROFESSIONAL	Multi-professional: Nurse, HCA, doctor and pharmacist
LEARNING OBJECTIVES	
TECHNICAL <ul style="list-style-type: none"> • Demonstrate initial assessment ABCDE • Identify signs and symptoms of DKA • Demonstrate recognition of hyperglycemia • Document BM correctly and escalate hyperglycemia • Demonstrate understanding of potential cause of DKA • Discuss differential diagnosis • Discuss use of Fluids and insulin • Demonstrate understanding of gas result • Communicate / recognise need to check BM every hourly • Recognise the need to refer to DSN 	NON-TECHNICAL <ul style="list-style-type: none"> • Develop team working skills • Develop good communication • Confident use of equipment • Demonstrate calling for help • Utilise SBAR for hand over
PREPARATION, ROOM AND EQUIPMENT SET UP	
INTRODUCTION TO MANIKIN AND ROOM REQUIRED?	YES
MANIKIN SET UP:	Live Patient sat in side room as have history of heavy night out drinking and vomiting. Patient is in own clothes.
ROOM SET UP (<i>Ward, Theatre, ITU</i>):	Room need to look like ward side room, with bedside table, chair and table and patient monitor
MONITOR SET UP:	RR 30 SATS 92% HR 115 BP 110/70 Temp 36.9

DRUGS AND PROTOCOLS REQUIRED:	Fluids, blood gas, drug Kardex with Insulin and fluids prescribed, IV cannula,
ESSENTIAL MEDICAL EQUIPMENT:	Oxygen mask, fluids, syringes, blood bottles, Bag of fluids. Infusion pump for fluids, BM machine fake BM result if gas and urine dip sticks.
TYPE OF DEBRIEF REQUIRED	Facilitator to assist discussion around ABCDE and differentials diagnosis. Diabetes nurses to then provide teaching session on management around DKA.
FACULTY ROLES REQUIRED TO RUN SCENARIO (<i>which, behaviour, clues</i>)	
<ul style="list-style-type: none"> • Controller and voice of mannequin – N/A • Phone operator for met call • Facilitator – Nurse • Smots viewing room 	
SETTING THE SCENE AND HANDOVER	
<p>BRIEF TO CANDIDATES: From facilitator Becky Jones 12/06/83 0123456A poor SBAR Situation 35 year female, who has recently been transferred to you ward after presenting ED with a hyperglycaemia.</p> <p>Background She went out to a party last night and was drinking heavily. Her friends reported she was really drunk and was sick at the end of the night. The next day her house mate reported she was difficult to wake but they thought she was just hungover. She has a history of well controlled diabetes and no known allergies.</p> <p>Last set of observation on admission to your ward Assessment Airway clear and patent Breathing resp rate is rapid 20 Circulation HR was 100 and BP was 110/60 with fluids running Disabilities patient was alert Exposure Temp 36.9 Recommendation can you go in to make a repeat assessment</p>	
EXPECTED SCENARIO COURSE AND TRIGGERS <i>(summary of clinical progression of the simulated patient)</i>	

- Brief to live actor: you are a V on the AVPU scale. You are confused and mumble words.
- Brief to facilitator: you will help scenario progression and fill in any blanks naturally you can perform task that may not be suitable to perform on live patient like BM or ABG.
- Expect ABCDE rather than set of observations as patient is unwell.
- **Trigger 1**, O2 sats 92% o2 needs applying. This is positional as patient head can be flexed as they are in and out of consciousness
- Expect rapid assessment of Circulation HR has increased and BP has dropped since the last set of observations. Fluids could potentially be given during circulation assessment
- **Trigger 2**, BM 25.1mmol. During disabilities assessment BM should be performed. Expected escalation for help.
- FY1 to attend and receive SBAR handover.
- Expected recap ABCDE and request for ABG and ketones. This is so they can confirm diagnosis of DKA
- **Trigger 3**, ABG show acidosis and high BM and normal potassium. Ketones show 5.5. We are looking for declaration of DKA and request for pathway.
- **Trigger 4**, Pathway 1l of saline required over 1hour and insulin infusion need prescribing and making up in 50ml syringe.
- Facilitator to ask how often to measure BMs
- Scenario to be ended

PATIENT PARAMETERS CHANGES FOR ON THE FLY CONTROL

INITIAL VITALS SIGNS: TRIGGER FOR TREATMENT

RR 30 SATS 92%RA HR 110 BP 100/50 Temp 36.9

VITAL SIGNS DISPLAYED

Not initially

ACTIONS TO TRIGGER CHANGES

CHANGE IN PARAMETERS:

1. Trigger: O2 sats 92% fix head position

O2 applied
RR 30 SATS 98% HR 110 BP 100/50

2. Trigger: BM 25.1mmol

Call for help
RR 30 SATS 98% HR 110 BP 100/50

3. Trigger: ABG acidosis and Ketones

Declaration of DKA and request pathway
RR 30 SATS 98% HR 110 BP 100/50

4. Trigger: Pathway

Fluids and insulin infusion required as per pathway
RR 30 SATS 98% HR 110 BP 100/50

EXIT STRATEGIES: Nurse facilitator to help

EVALUATION AND OUTCOMES

TYPE OF EVALUATION REQUIRED

Written

WHERE THE LEARNING OUTCOMES MET

YES/NO

