Ministry of Health
Emergency Medical Services ECHO
Case Presentation Form

Date:21/1/22_Presenter's name:Dr.Anena Joyce oyet_**Presenter's location, Gulu RRH**____

Patient Initials, _KB_____ Case Id (hub willassign):___Patient type: ☒Newcase ☐Follow up

Age:30_____Sex: ☒M Male ☐ Female **Diagnosis (if known)**: Hypovolemic. Shock 2" to Blunt Abdominal Trauma_____

What is your presenting Complaint?

Severe Abdominal pain following RTA for 2hrs

History of presenting complaint- Duration and Progress

HPC

Received a 30y/o M brought to A& E at 0:10 Hrs. on 4th 12 2021 as self-referral by unknown transportation system with chief complain of severe acute Abdominal pain that progressively worsen from around 10pm same day following involvement in RTA reportedly head on collision involving a Truck driver and a private Vehicle, pain is cruciating along line of seatbelt from left to right and from chest to abdomen. No external bleeding reported

Systems review of the illness:

Review of systems was not reliable patients was grossly confused; most question answered inappropriately.

Disease concerned	General/Other
	• For e.g. Skin, Endo, HEENT, Resp, CV, GI

Significant Medical/Surgical history

Traveler with unknown past history known to acquaintance who brought her

Social history and pertinent family history

Work status: music producer	Occupation:bussinessman
Education: unknown	Socio-economic class: middle class
Marital status: unknown ☐	Lifestyle habits: musician
Relevant health conditions in the close family members? unknown	

Examination Findings

Airway

patent

Breathing

Normal bronchovesicular breath sounds not labored, RR28bpm

Circulation

On arrival vitals was of Strong, regular pulse at rate of 110bpm and BP 136/115mmHg at 12:15hrs
Repeated at 1:15 hrs.; vital signs of patient were of undetectable pulse, so was BP, body was cold and pale with distant heart sounds irregularly irregular.

Disability;

Patient is irritable, agitated and uncooperative, no open bleeding from chest walls and abdomen.
Severe wasting and poor nutrition status
No obvious musculoskeletal deformity noted, except cutaneous bruising along waist line,

Exposure,

well exposed and cold

Vital Signs; On arrival vitals taken at 00:15 hrs; after 1hour at 1:15hrs
Blood Pressure, ____undetectable_____ Pulse rate, __undetectable_____ SPO2, 98%_ RA_____
Temperature, _____35.70C_____ Respiratory rate, ___28_____ Weight, __not taken___
Height, __not measured_____

Relevant Systemic Examination
Central Nervous System
Irritable, confused and restless, GCS
Motor response 6 verbal response 4 Eye opening 4 (14/15)

Cardiovascular System
Moderate to severe pallor, fast pulse but regular, PR 110 bpm on arrival and BP 136/115mmHg, HS 1 &2 heard with no added heart sounds
After 1hr repeated vital signs of the patient was of undetectable pulse, so was BP, body was cold and pale with distant heart sounds irregularly irregular.

Per Abdomen
Abdomen was scaphoid, marked tenderness at hypogastrium, no guarding, no palpable abdominal mass
Abdominal aspirate was tea colored peritoneal fluid

Musculoskeletal
No obvious deformity was noted

Case Summary
30y/o M admitted at A& E, with c/o Severe progressing Acute Abdominal pain following fatal RTA involving head on collision of a truck and a private car 3hrs prior to admission, patient was irritable and confused, with GCS Score 14/15 with no obvious musculoskeletal deformity or external bleeding detected, Vital signs on arrival PR 110bpm, BP 136/115mmHg, RR28bpm and Spo2 98% RA, system examination done was P/A bruising along the waist line, no distension or guarding but severe hypogastric tenderness. Abdominal Aspirations in four abdominal quadrants yielded tea colored peritoneal fluid suggestive of hemoperitoneum.

Focused investigation *(list and attach pertinent labs)*

Current Labs			
Test	Result	Reference range	Comments/Interpretation
Sample removed for blood grouping and crossmatching, and CBC	CBC result had not yet been sent back	NA	Patient was very unstable and agitated was being resuscitated BT started Other test were not requested yet
Imaging/ Special investigations			
Test desired but not available in the hospital for now		Salient findings	
Bed side US machine for Abdo pelvic US scan			
Erect abdominal x-ray			
Abdominal CT scan			
MRI Abdominal spine/ myelography			

Provisional Diagnosis:

Blunt Abdominal Trauma with Hemorrhagic Shock

DDx:

1) **Ruptured Visceral organs (Urinary Bladder/Intestine) and Sheared Abdominal vasculature /mesenteries/omentum.**
2) **Acute Lumbar spinal Injury**

In view of:

1) **Unexplained Hypotension**
2) **Severe Acute Abdominal pain**
3) **Having been involved in a Fatal RTA and wearing a seat belt**
4) **Bruising along waist line**

Management Plan

Prepare for Exploratory laparotomy
Call for MO immediately and Surgeon called at 1:00Hrs and arrived at 1:15hrs, MO arrived shortly after the surgeon and so was anesthetist
IV NS0.9% 3l as fast as possible, 500ml hanged up immediately
Book at least 2units of blood and BT with 1 unit now,1 unit of whole blood picked by the intern MO immediately; BT started at 00:45 am the delay was because of lack of blood giving set however patient removed the line shortly.
Oxygen supplement 5l/min via nasal prong, connected at 1:15 Hrs. however patient removed.
Foot of bed raised to about 30 degrees then
Theatre informed to prepare for Ex- lap. Call made at 00: 15hrs but Anesthetist wasn't within hospital came few Minutes after 1:15hrs,
Then environment was Hot for the Drs as the patient went cold: CPR started at around 1:20hrs However, patient continued to deteriorate in the following 50mins and declared dead after about 30 mins of CPR.
MHSRIP

Limitations

1) First Delay in referral by Attendant Patient spent 2 hrs. after RTA before seeking help.
2) EMS in the region not activated perhaps due to lack of public awareness
3) Lack of supplies like blood giving set in the hospital
4) No available mobile or bed side radiological machines like US scanner, mobile Xray Machine and other wishes like CT scan, MRI machines
5) Few Human Resources on Ground at all times, a lot of time spent mobilizing DRs, Aneathetist
6) Laboratory needed to be operational at full capacity all times
7) Knowledge Gap and work burn out for Junior staffs evident., Identification for early signs of Shock, IV access was inadequate even when shock was Identified, patient plucked off the one IV line that was put on arrival, Frequent vital signs monitoring was not done. Long hrs. and few HR at work without rest leads to work burn out.

Postmortem Reports

1) Multiple laceration of small intestine
2) Tear and shearing of Omentum, mesentaties and grossbruising
3) Tear in both Abdominal Aorta and IVC
4) Dislodged L4 and L5 vertebrae
5) Hemoperitoneum with 2 to 2.5l blood loss and multiple large clots

FINAL DIAGNOSIS
Hemorrhagic Shock from Multiple Abdominal Visceral organs/structure internal bleeding following RTA