[TUESDAY] Trauma Care Scenarios

26 YOM w/ TBI & Spinal Injury MVA

Scenario Set Up	*Equipment:* c-collar, NRB/O2 admin *PROCTOR:* Patient (26 y/o male) is unconscious. There is another passenger (30 y/o female - sibling to patient) who provides info, who has exited vehicle on their own & is cleared before EMT arrival Nighttime, heavy rain, car hydroplaned on freeway causing rollover collision. Witnessing vehicle called 911 while driving away If they ask - road has been blocked off & scene is safe
Dispatch	Respond to C3 Rollover Motor vehicle accident on freeway involving 1 vehicle
Scene Size Up	See patient in vehicle unresponsive, car smoking, sister is standing outside worried P - should wear fluorescent safety vest in addition to PPE E - confirm road is blocked off N - 1 patient M - trauma MVA A - call for ALS N - rapid extrication, THEN manual C-spine stabilization
Pertinent Primary Assessment Findings	*AVPU* - Unresponsive *A* - Hear snoring respirations (Open airway w/ jaw thrust → open & patent) *B* - Rate 22, Rhythm Irregular w/ rapid shallow breathing followed by short apneic period, Quality sounds clear equal bilaterally *C* - Skin pink warm dry, HR 50 bpm, rhythm regular, quality bounding, Cap refill under 2 seconds Decision to transport - Load & go after rapid head to toe assessment

Pertinent Secondary Assessment Findings	Rapid Head to Toe assessment findings: (expose, palpate, & assess DCAP-BTLS) negative PEARL palpate spinal step-off Palpate crepitus at ribs from seatbelt/steering wheel force DRGERM reveals rigidity in abdomen Closed forearm fracture Shard of glass impaling thigh (slow, oozing bleeding) Contusions on both lower legs Ask sister SAMPLE A - NA M - insulin P - diabetes L - dinner a couple hours prior E - brother missed the exit and swerved to try and make it, car flipped over
Vitals	*BP:* 136/64 , *HR:* 50 , *RR:* 22, *BGL:* 110, *SPO2:* 91 If they ask for second set of vitals after treatment → patient has wider BP & lower HR
Treatments	Rapid Transport to trauma center - red criteria pt → highest level trauma center in geographic region; Reassess every 5 mins bc unstable O2 admin via NRB 15 Lpm C-collar AFTER primary assessment & rapid head to toe, but NO backboard bc supine position could increase ICP; transport w/ head elevated Splinting (Treat lifethreats & transport 1st - this should be done en route → splint in position of function & can give ice pack) Do NOT remove impaled object (secondary treatment after rapid head to toe & life threats - direct pressure until minor bleeding stops & stabilize object in place w/ pressure dressing)
Key Points	Recognize Cushing's Triad - slow HR, irregular RR (very rapid w/ intermittent pauses), widened BP
Bonus Questions	What are we looking for during rapid head to toe assessment? DCAP BTLS What does DCAP BTLS stand for? What type of respirations are associated with traumatic brain injuries? Cheyne Stokes Respirations What type of shock should we consider with these injuries and what symptoms are associated with this type of shock? Neurogenic shock - loss of

	CNS function resulting in vasodilation; skin still pink, warm, & no sweating/function below spinal injury location

Example Scenario

68 YOF w/ Severe Bleeding (Hypovolemic shock) & Femur Fracture

Scenario Set Up	Equipment needed: NRB, O2, tourniquet, traction split PROCTOR: You are a 68 year old grandma who lost balance in the kitchen while standing on a stool grabbing a can of soup from the top shelf. On the way down, you hit your right thigh on the edge of the marble countertop before falling to the ground on your left side. You are laying down with your eyes closed and a pool of blood forming. You are weak, have fast, shallow breaths, and pain in both thighs. Your granddaughter who saw the fall calls 911. You are confused and speak in short responses. The granddaughter should answer and help respond.
Dispatch	Respond C3 to a 68-year-old female, fallen from stool. Patient conscious but confused. Caller reports significant bleeding.
Scene Size Up	Patient laying on kitchen floor with eyes closed, pool of blood **Should** trauma strip/expose to find bleeding on right thigh → direct/second pressure does not stop bleeding → tourniquet stops bleeding 2 cm superficial laceration on left forearm (not immediate, but pt on bloodthinners) P - gloves E - private residence, no hazards N - 1 patient M - MOI A - call for ALS (see pool of blood) N - manual C-spine immobilization
Pertinent Primary Assessment Findings	A**V**PU → Verbal A&O X 2 (-) time, (-) event A - patent, no obstruction/stridor, speaking in short/weak responses B - tachypneic, shallow, slightly labored, equal chest rise/fall, clear lungs bilaterally C - pale, cool, clammy weak, rapid radial pulse

	cap refill >3 sec Obvious deformity in left thigh Decision to transport – load and go (go after rapid head-to-toe assessment or can continue assessment in ambulance → trauma center)
Pertinent Secondary Assessment Findings	(SAMPLE provided some by pt, most by granddaughter) S - dizziness, nausea, confusion, weakness, etc… A - none M - Warfarin (for A-fib stroke control; a blood-thinner!!), Lisinoprol (for high bp), Metoprolol (for A-fib rate control) P - Atrial fibrillation, hypertension, osteoporosis L - lunch 2 hours ago E - reaching for can of soup on stool, fell over and hit edge of countertop D - left thigh C - forming on left leg A - slight on palms, left elbow P - none B - none T - left thigh L - 2 cm left forearm → direct pressure stops bleeding; 7 cm deep right thigh (tourniquet, should be taken cared of) S - left thigh (in case asked → main pain in leg, minor pain throughout body) O - sudden pain after falling and hitting countertop P - pain worse with movement/touched, nothing makes better Q - sharp, deep R - stays around mid-thigh S - high (8-10) T - not getting better, starting to feel more weak
Vitals	HR: 124, RR: 26, BP:96/62, SPO2: 92%, T: 98.6, BGL: 108
Treatments	Bleeding control (pressure/tourniquet), treat for shock (supine, warm, NRB ~15 LPM), traction splint
Key Points	Stop the bleeding on right thigh, direct pressure on left forearm. Traction splint. Pt bleding + blood thinner = not good. Recognize hypovolemic shock. (tachycardia, pale cool clammy, weak pulse, cap refill >2 sec, hypotension, AMS

	Elderly pts more susceptible to fractures/bleeding (thin skin, brittle bones).
Bonus Questions	What kind of shock is the patient in? Compensated or decompensated? How do blood thinners affect this specific trauma scenario?