

Mr. Ferguson's TPJ Quick Reference Chart

1 B.S.I

Body
Substance
Isolation

AVPU – Alert, Verbal, Pain, Unresponsive
CAB – Circulation, Airway, Breathing (look, listen, feel)
LOC – Level Of Consciousness (person, place, time, event)
GCS – Glasgow Coma Scale (eyes/4, verbal/5, motor/6)

2 Scene Size-up (S_x)

Ensure a safe environment for rescuers, patients, and bystanders | anticipate potentially hazardous situations | call for appropriate resources | identify potential scene hazards that may endanger the EMT or the patient | evaluate the "whole picture" of the call | Primary Scene Survey | number of patients | Begin Triage | call for back-up/help | stabilize the vehicle | ropes and knots | stand by suppression

3 Initial Assessment

Quickly determine the nature of the illness or mechanism of injury, using general impressions to assess patient's *Position/Signs/Activity* | AVPU | "Hey, hey are you okay?" | CAB | "Wet Check" (initial component of the **Physical Exam: P_x**)

4 Emergency Treatment (T_x)

FA | CPR | O₂ | AED | bleeding | suction | bandage | splint | extrication | C-spine | C-collar | KED (*Kendrick Extrication Device*) | Spine Board | etc.

5 Focused History (H_x)

Trauma or Medical? (see 5A, 5B, and 5C) | Medical history | chief complaint | OPQRST | associated symptoms | summarize

6 Glasgow Comma Scale (GCS)

	1	2	3	4	5	6
Eyes	Does not open eyes	Opens eyes in response to painful stimuli	Opens eyes in response to voice	Opens eyes spontaneously	N/A	N/A
Verbal	Makes no sounds	Incomprehensible sounds	Utters inappropriate words	Confused, disoriented	Oriented, converses normally	N/A
Motor	Makes no movements	Extension to painful stimuli	Abnormal flexion to painful stimuli	Flexion / Withdrawal to painful stimuli	Localizes painful stimuli	Obeys commands

5A Trauma

Rapid Focused P_x and H_x

I. Rapid focused P_x

1. Head
2. Neck
3. Chest
4. Pelvis
5. Abdomen (**TRDG**)
(Tenderness, Rigidity, Distension, Guarding)
6. Extremities
7. Back
8. Baseline Vitals

Signs of Trauma (**DCAPBLS-TIC-PMS**)

1. Deformities
2. Contusions
3. Abrasions
4. Punctures/Penetrations/ Paradoxical Movement
5. Burns
6. Lacerations
7. Swelling
8. Tenderness
9. Instability
10. Crepitus
11. Pulses
12. Motor response
13. Sensory

II. Rapid focused H_x **SAMPLE**

1. Signs
2. Allergies
3. Medications
4. Past H_x
5. Last oral intake
6. Event

7 Digestive System

Processes solids and liquids
Transcends oral, thoracic, abdominal, and pelvic cavities. Into mouth, esophagus, stomach, small intestine (*duodenum, jejunum, and ileum*), large intestine [*cecum* (appendix is attached to), the *ascending* (right) *colon*, the *transverse* (across) *colon*, the *descending* (left) *colon*, and the *sigmoid colon*], *rectum*, and *anus*. Other organs: gallbladder, liver, and pancreas.

5B Medical

Rapid Focused P_x & H_x

I. Rapid focused P_x

1. Head
2. Neck
3. Chest
4. Pelvis
5. Abdomen (**TRDG**)
6. Extremities
7. Back
8. Baseline Vitals

II. Evaluate Chief Complaint (**OPQRST**)

1. Onset
2. Provocation
3. Quality
4. Radiation
5. Severity
6. Time

III. Rapid Focused H_x **SAMPLE**

1. Signs
2. Allergies
3. Medications
4. Past H_x
5. Last oral intake
6. Event

IV. Baseline Vital Signs

1. Pulse
2. Respirations
3. Blood Pressure
4. Skin
5. LOC/GCS and Pupil Reaction
6. H_x
7. On-Going Assessment:
Trauma, 5 min
Other 15 min.

5C Detailed P_x

Head
Face
Ears
Eyes
Nose

Mouth
Neck
Chest
Abdomen

Pelvis
Extremities
Back
Reassessment of
Baseline Vitals

8 Shock

- Secure Airway (i.e., patent airway)
- Heat Conservation in the body
- Oxygenation of RBCs
- Core Perfusion improved by elevating legs
- Keep the field time short

PEARL

Pupils Equal And Reactive to Light

Compensated: Hypoperfusion/ Hypoxia starts – compensated by reduced container, constricted blood flow, increased respiratory rate, increased force of heart contractions

Uncompensated: Decreased organ perfusion– no longer maintains normal BP ↑ time cells die. *Irreversible* (cease to function, little can be done in field, transport immediately)

Types of Shock:

- Hypovolemic** — Low Volume
- Cardiogenic** — pump failure
- Psychogenic** — emotional
- Septic** — infections
- Anaphylactic** — severe allergic reaction

9 Body Cavities

Skull, Thoracic, Abdominal (divided into four quadrants)

10 Nervous System

The Central Nervous System (CNS)

Command center of the body: Brain and Spinal column | Cerebellum (big), Cerebrum (little)

The Peripheral Nervous System (PNS)

Sensory nerves (carry messages from body to CNS)
Motor nerves (carry messages from CNS to body)

Autonomic nervous system: carries out voluntary and involuntary actions

Sympathetic nervous system: speeds up heart rate
Parasympathetic slows down heart rate

11 Word Roots

ROOT WORDS/MEANINGS

CARDI/Heart, OSTE/Bone, GASTR/Stomach, NEPHR/Kidney, PHLEB/Vein, TRACHE/Trachea, THORAC/Chest

PREFIXES/MEANINGS

AMBI/Both, Both Sides | PRE/Before, In Front | HYPO/Under, below | EPI/Upon | INTER/Between | POST/After, Behind

SUFFIXES/MEANINGS

ECTOMY/Excision | IT IS/Inflammation | CENTESIS/Surgical Puncture | METER/Instrument to Measure | SCOPY/Visual Exam | PARESIS/Partial Paralysis

12 Cardiovascular System

Primary Components: Heart, Blood Vessels, Blood (pump, pipes, fluid)

Main Circuits: Pulmonary (Lungs) and Systemic (Body)

Heart has 3 layers: Epicardium, Myocardium, and Endocardium

Pericardium: thin sack surrounding the heart

Arteries flow away from the heart; Veins, to the heart

Aorta, Arteries, Arterioles, Capillaries, Venules, Veins, Superior/Inferior Vena Cava

Artery: Aorta, Coronary, Carotid, Femoral, Brachial, Radial, Iliac, Pedis, Tibial

Vein: Superior/Inferior Vena Cava, Iliac, Femoral, Great Saphenous

4 Heart Valves: Tricuspid, Pulmonary, Mitral, Aortic

Pulmonary Arteries: take de-oxygenated blood to the lungs

Pulmonary Veins: bring oxygen rich blood to the heart

Blood Composition:

Plasma — suspends blood cells and nutrients (45% of blood fluid)

Red Cells (RBCs) — (erythrocytes) contain hemoglobin (bind O₂ to tissue)

White Blood Cells (WBCs) — (leukocytes) fight infection (5 types)

Platelets — (thrombocytes) clots blood

Adult: 5-6 liters of blood (5000ml); Infants, 800ml; newborn 300ml

Blood Pressure (average normal readings): Adult Male — 120/80; Adult Female — 110/70

Systolic — left ventricle contracts, high number

Diastolic — left ventricle rests, low number

Perfusion: circulation of blood through organ/structure (capillary refill check: press nail)

Heart will pump out/cycle blood in 1 minute. Called “Cardiac Output”

Radial Pulse is the most used; carotid, easiest to find. Check *Rhythm*, *Quality*, and *Rate*

Rhythm: Intervals between beats, regular/irregular

Quality: Full=Strong | Bounding=Extremely Strong | Thready=Weak/Rapid

Rate: Adult 60-100 | Child 80-100 | Infant 100-140 | Newborn 130-140

Tachycardia=high pulse >100 | Bradycardia=low pulse <60

13 Integumentary System

Largest organ of the body

Protects the body from environment

3 Layers: Epidermis | Dermis | Subcutaneous liquids

14 Muscular System

3 Types

Voluntary

Contract/Relax at will | Tendons connect bone to muscle creating pull when the muscle

Contracts | Striated

Extension (muscle relaxes) | *Flexion* (muscle contracts)

Involuntary

Smooth muscles

Cardiac

Found in heart (smooth) | Generates own contraction

Has 3 layers:

Epicardium (outer)

Myocardium (mid contracts)

Endocardium (inner)

15 Respiratory

Mouth, Nose, Oropharynx, Nasopharynx

Pharynx, Epiglottis Larynx, Vocal cords

Trachea, Carina, Bronchi, Bronchioles

Alveolus, Lungs 3 lobes right/ 2 left, Diaphragm, Visceral

Pleura, Parietal Pleura, chest wall, Intercostals

Ventilation: 12-20 adult | 15-30 child | 25-30/50 infant

Measure: Rate/Rhythm/Quality/Depth

Mediastinum, Tidal Volume=500ml

16 Endocrine

Secretes chemicals called hormones from glands into Bloodstream. The hormones regulate body activities and functions. Two major hormones are epinephrine (adrenalin) and insulin. Insulin is produced by the pancreas and metabolizes glucose for energy.

17 Skeleton

SKELETON

CARTILIDGE between bones lubricate and cushion

LIGAMENTS hold bones together

206 Bones divided into eight parts

JOINTS

Ball and Socket, Hinged, Pivot, Fused/Sutured
Ellipsoid, Saddle, Plane/Gliding Joints (bone to bone)

SKULL

 (4 major areas)

Frontal, Occipital, Temporal, Parietal

BONES of the FACE

 (5 major bones)

Nasal, 2 Maxilla, 2 Zygomatic, Mandible, Orbit

SPINAL COLUMN

33 bones called vertebrae

7 Cervical, 12 Thoracic, 5 Lumbar, 5 Sacrum, 4 Coccyx

THORAX

12 Ribs attached posteriorly to thoracic vertebrae

Of 12, only 10 attached anteriorly to the Sternum

Sternum divided into 3 parts: Manubrium, Body, Xiphoid Process

PELVIS

Iliac Crest, Isthium, Pubis

UPPER EXTREMITIES

Shoulder blade (3 parts) Scapula, Acromion, Clavicle,

Humerus, Ulna, Radial

Carpals, Metacarpals, Phalanges

LOWER EXTREMITIES

Femur Hip Joint Patella Tibia Fibula

Ankle (Medial and Lateral Malleolus)

Foot (Tarsals and Metatarsals)