Scenario #1 GROUP A

67 year old man doesn’t speak English

Here from Somalia this year

History of paraplegia from explosion 5 months ago

Incomplete Spinal lesion T9

Has some sensory function below level of injury

Procedure: Urethral stents being placed to help with urinary incontinence

Outpatient

Medical history- none on file

smoker

weight 65 kg

height 5'11''

heart and lungs normal to auscultation

BP 110/60

Pulse 72

SPO2 95% RA

Mallampati 1

tmd>3fb

Interpreter present

What things do you want to ask the interpreter?

What drugs do you want in the room or available?

What is the physiology of autonomic hyperreflexia?

What will you do to prevent it?

What is your anesthetic plan?

Scenario #2. GROUP B

18 year old female

Unstable C5 fracture from diving

68 kg

5'7''

No previous medical history

SPO2 97% 2 L O2

BP80/50

Pulse 55

LR running through 18 gauge

Lungs diminished

heart sounds regular

Glascow scale 14

ACDF C5-6

Soft collar on patient

Patient ate small meal 5 hours ago

hgb 12.0

k, 4.0

How will you manage airway and induction?

What physiological hemodynamic response do you expect and why?

what medications will you have in the OR for the case?

what clinical factors will you assess to determine ventilatory need and support postop and preop

what is your extubation plan?

Scenario #3. GROUP C

90 year old female from nursing home

fell and fracture right hip

RIght hemiarthroplasty hip

hgb 8.0

k 3.6

creat 1.0

type and screen done

medical history:

hypertension

mild dementia

52 kg

5'2''

BP 100/52

Pulse 95 regular

EKG NSR

SPO2 92% on 2L

glucose 105

alert and oriented x2

Airway exam

Mal I

upper dentures

20 gauge IV

NKDA

possible position for this procedure?

what monitors?

What meds?

what IV access?

what type and anesthetic? Why choose one over the other?

whats the morbidity and mortality for the elderly and hip fracture?

What type of pain control will you decide on?

Scenario #4. GROUP D

44 year old male

admitted 3 days ago mva

Tibial Plateau fracture

Bilateral shoulder dislocations

Surgery to apply fixator on admission along with shoulder manipulation on admission currently postop day #3

previous anesthetic uneventful

grade 1 view with glidescope

Blood alcohol level 0.18 on admission

on etoh withdrawl protocol

Getting fixator off and performing open reduction internal fixation tibial plateau

hgb 11.0

k 3.8

Past medical history

lung disease

on albuter inhaler

everyday smoker

marijuana smoker

4 cans of beer daily

anesthetic plan?

meds?

tourniquet?

explain tourniquet pain

explain considerations with tourniquet use

when does tourniquet pain occur?

What relieves it?

What physiological response is seen with tourniquet use and release?

Scenario #5. GROUP E

68 y/o male

C7-T1 Posterior cervical fusion with SSEP neuromonitoring L1-L4 lumbar laminectomy;cellsaver .surgeon has requested anesthesia to keep MAP at least 85-90 Pt will be prone with arms tucked and be in mayfield tongs

120 kg

5'8"

Diabetes Type 2

Metformin

lasix

Hypertension

CAD

lisinopril

metoprolol

exam

Previous anterior cervical fusion with limited mobility

mall II

TMD>3

glucose 120

18 gauge iv running with LR

BP 115/78

HR 60

SPO2 95 % RA

Hgb 12.3

K3.8

creat 1.2

NSR with PVC's

lung sounds clear

heart sounds regular no murmur

bilateral lower extremity edema; Pt states is his normal

What monitors and Iv access is needed?

What considerations with positioning is needed?

What type of anesthesia will you use?

what meds will be available?

What is his Allowable blood loss?

How will you evaluate fluid needs and status?

Scenario#6. GROUP F

88 year old female

right distal femur fracture

procedure: Right Knee arthroplasty

101 kg

5' 6"

BP 125/80

HR 85 irregular

CAD

Afib

previous stentsRCA 2007

pulmonary htn

lungs clear

Mal I

TMD>3

hgb 10.8

k 3.5

INR 3.5

Vitamin K IV given on the floor 6 hours ago

repeat INR to be drawn in pre-op

surgeon orders cell saver as tourniquet cannot be used based on location of fracture

Whats the anesthetic plan

What monitors

ABL?

What are some potential complications related to type of procedure

Cement will be used what are some side effects and risks

Scenario #7. GROUP G

64 year old female

68 kg

Right shoulder replacement

Hx

everyday smoker x30 yrs

on home O2 2L

Htn

Chronic Pain

TIA 2013 no deficits

AICD/pacemaker

Echo 60%EF

BP 165/83

HR 80 regular

SPO2 92% 2L

Lungs diminshed

Meds

Albuterol

Symbicort

Metoprolol

MS Contin 20 mg BID

What your anesthetic plan?

What is usual position for shoulder surgery?

What are you concerned about?

What monitors?

What drugs intraop?

How will you manage pain?

Scenario#8. GROUP H

24 year old fall from bridge 2 days ago

stabilized on floor

Right broken acetabulum

Broken Right humerus in sling

Rib fractures bilateral

coming to OR for Rt acetabulum fixation

Hgb 9.5

K 3.6

Pt will be positioned prone

What monitors?

What kind of IV access?

During the case O2 Saturations drop from 98% to 90%

You increase the FIO2 from 0.6 to 1.0 and add 5 cm peep. SPO2 increases to 92% The pts PaO2 is decreasing despite increases in O2 concentration and ventilation

You notice a petechial rash and suspect fat embolism syndrome.

Explain FES

How do you diagnose?

How do you treat?

What is the prognosis?