

Medical Reference Cards

github.com/alping/medical-reference-cards

C-ABCDE

C Catastrophic bleeding / Cardiac arrest

A Airways

Check airway

Thorax movement

See, listen, feel

Paradox. breathing?

Stridor?

1. Chin lift/Jaw thrust

2. Naso/Oropharyngeal airway

3. Suction

4. Laryngeal mask airway

5. Intubation

6. Coniotomy

B Breathing

Respiratory rate

Thorax movement

Auscultation

Cyanosis

1. Oxygen

2. Ventilation

3. Decompression

4. Chest tube

C Circulation

Colour (Pale)

Cold/Sweaty

Pulse (Rad / Fem / Car)

Abdomen/Pelvis

1. Tilt bed

2. Fluids (PVC, IO, CVC)

3. Vasoactive drugs
(Adrenalin IM)

D Disability

AVPU/GCS

Pupils

Movement of extrem.

1. Support ABC

2. Glucose

3. Antidote

E Exposure

Check whole body

Prevent hypothermia

Prevent further injury

1. Log roll

2. Warm blankets

3. Warm fluids

SBAR

S Situation

Own name, title, and unit

Patients name, sex, and age

Patients social security / identification number

Describe situation briefly

I'm contacting you to...

B Background

Previous and current illness

Relevant medical history

Allergies

Contagiousness

A Assessment

A: Airway

B: Breathing, saturation

C: Heart rate, blood pressure

D: Consciousness, pain, oriented to time / place / person

E: Temperature, skin, colour, abdomen, urine production

Brief assessment

R Recommendation

Immediate action (Care, monitoring, transfer, treatment)

Further examinations (Radiology)

Time frame (How often...? How long...? Next contact...?)

Confirmation of communication

Questions / Agreement

Lab reference (Swe)

Sys.	Component	Subgroup	Ref. interval	Unit
P/S	ALAT	Male	0,15 – 1,1	µkat/L
		Female	0,15 – 0,75	µkat/L
P/S	ALP		0,60 – 1,8	µkat/L
P/S	Amylas		0,40 – 2,0	µkat/L
P/S	Albumin	18 – 40 y.	36 – 48	g/L
		41 – 70 y.	36 – 45	g/L
		>70 y.	34 – 45	g/L
P/S	ASAT	Male	0,25 – 0,75	µkat/L
		Female	0,25 – 0,60	µkat/L
P/S	Bilirubin		5 – 25	µmol/L
P/S	Calcium		2,15 – 2,50	mmol/L
P/S	CK	Male 18 – 50 y.	0,80 – 6,7	µkat/L
		Male >50 y.	0,70 – 4,7	µkat/L
		Female	0,60 – 3,5	µkat/L
P/S	Fosfat	Female	0,80 – 1,5	mmol/L
		Male 18 – 50 y.	0,70 – 1,6	mmol/L
		Male >50 y.	0,75 – 1,4	mmol/L
fP	Glukos		4,2 – 6,3	mmol/L
P/S	GT	Male 18 – 40 y.	0,15 – 1,3	µkat/L
		Male >40 y.	0,20 – 1,9	µkat/L
		Female 18 – 40 y.	0,15 – 0,75	µkat/L
		Female >40 y.	0,15 – 1,2	µkat/L
P/S	Järn		9 – 34	µmol/L
P/S	Järnmättnad	Male	0,15 – 0,60	
		Female 18 – 50 y.	0,10 – 0,50	
		Female >50 y.	0,15 – 0,50	
P	Kalium		3,5 – 4,4	mmol/L
S	Kalium		3,6 – 4,6	mmol/L
P/S	Kolesterol	18 – 30 y.	2,9 – 6,1	mmol/L
		31 – 50 y.	3,3 – 6,9	mmol/L
		>50 y.	3,9 – 7,8	mmol/L
P/S	HDL-Kolesterol	Female	1,0 – 2,7	mmol/L
		Male	0,80 – 2,1	mmol/L

Lab reference (Swe)

Sys.	Component	Subgroup	Ref. interval	Unit
P/S	LDL-Kolesterol	18 – 30 y.	1,2 – 4,3	mmol/L
		31 – 50 y.	1,4 – 4,7	mmol/L
		>50 y.	2,0 – 5,3	mmol/L
P/S	Kreatinin	Male	60 – 105	µmol/L
		Female	45 – 90	µmol/L
P/S	LD	18 – 70 y.	1,8 – 3,4	µkat/L
		>70 y.	1,9 – 4,2	µkat/L
P/S	Magnesium		0,70 – 0,95	mmol/L
P/S	Natrium		137 – 145	mmol/L
P/S	Pankreasamylas		0,15 – 1,10	µkat/L
P/S	Protein		64 – 79	g/L
P/S	TIBC		47 – 80	µmol/L
P/S	Triglycerider		0,45 – 2,6	mmol/L
P/S	Urat	Male	230 – 480	µmol/L
		Female 18 – 50 y.	155 – 350	µmol/L
		Female >50 y.	155 – 400	µmol/L
P/S	Urea	Male 18 – 50 y.	3,2 – 8,1	mmol/L
		Male >50 y.	3,5 – 8,2	mmol/L
		Female 18 – 50 y.	2,6 – 6,4	mmol/L
B	Hemoglobin	Female >50 y.	3,1 – 7,9	mmol/L
		Female	117 – 153	g/L
B	EVF	Male	134 – 170	g/L
		Female	0,350 – 0,458	
B	Erytrocyter	Male	0,393 – 0,501	
		Female	3,94 – 5,16	10 ¹² /L
B	MCV	Male	4,25 – 5,71	10 ¹² /L
			82 – 98	fL
Erc	MCH		27,1 – 33,3	pg
Erc	MCHC		317 – 357	g/L
B	Leukocyter		3,5 – 8,8	10 ⁹ /L
B	Trombocyter	Female	165 – 387	10 ⁹ /L
		Male	145 – 348	10 ⁹ /L

CHA2DS2VAS

C	Cardiac - Heart failure	1
H	Hypertension	1
A	Age ≥ 75 years	2
D	Diabetes	1
S	Stroke/TIA/embolism	2
V	Vascular Atherosclerotic disease	1
A	Age 65-74	1
S	Sex - Female*	1

*No indication for antithrombotic treatment if only risk factor

**AF and score $\geq 2 \rightarrow$ Antithrombotic treatment
IF low-medium risk of bleeding (HAS-BLED < 3)**

See local guidelines for specific antithrombotic drugs

Example of initial Warfarin treatment, 2.5mgx1 p.o.

Day 1: 2-4 | Day 2: 2-3 | Day 3: 1-4 (dep. on INR)

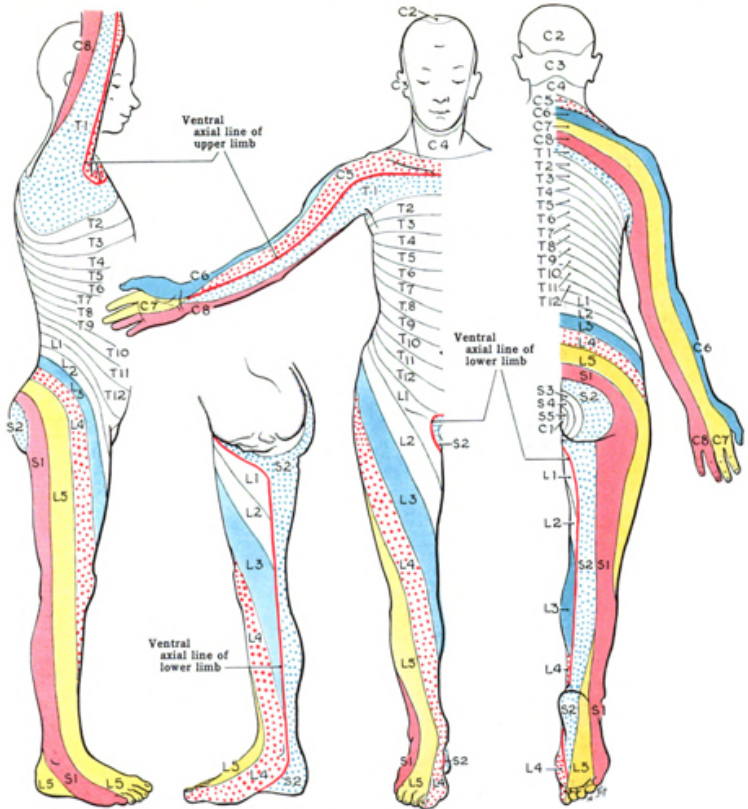
HAS-BLED

H	Hypertension >160 mmHg	1
A	Abnormal liver or kidney function*	1-2
S	Stroke	1
B	Bleeding Previous tendency or anaemia	1
L	Labile INR High/unstable INR or <60% time in therapeutic range	1
E	Elderly (>65 years)	1
D	Drugs E.g. ASA, NSAID or high alcohol consumption	1-2

* Kidney: Creatinine >200, dialysis, or transplant
Liver: Chronic liver disease, Bilirubin 2x ref, or
ALAT/ASAT/ALP 3x ref.

High risk of bleeding if ≥ 3 points

Dermatomes



Myotomes

Segment	Function
C1/C2	Neck flexion/extension
C3	Neck lateral flexion
C4	Shoulder elevation
C5	Shoulder abduction
C6	Elbow flexion/wrist extension
C7	Elbow extension/wrist flexion
C8	Finger flexion
T1	Finger abduction
L2	Hip flexion
L3	Knee extension
L4	Ankle dorsi-flexion
L5	Great toe extension
S1	Ankle plantar-flexion/ankle eversion/ hip extension
S2	Knee flexion
S3–S4	Anal wink

Neurological exam.

The whole time

Psychiatric: Wakefulness, oriented to time/place/self

Motor: Facial expressions, general

Dysarthria, dysphasia, right or left handed

Higher cortical functions: Apraxia, spatial function, neglect

Standing

Walk across the room

Walk on toes/heels

Squat and rise

Sight and hearing

Sitting

Face: Symmetry, ptosis, corneal reflex

Pupils: Size, reaction to light

Eye movements: Nystagmus, diplopia

Sight: Donder's test

Mouth and throat: Symmetry, swallow reflex, gingival hyperplasia, cranial nerve XII

Sensitivity to light touch, vibration, temperature, and pain

Motoric function for cranial nerve V, VII, XI

Reflexes in arms and legs

Grasset's test

Auscultation of lungs

Palpate lymph nodes

(Smell and taste)

Lying down

Neck stiffness

Muscle strength: proximal + distal, in arms and legs

Muscle tone, atrophies, fasciculation, tremor,

Heel-knee test

Dysdiadochokinesis

Abdominal reflexes

Barré's test

Babinski's sign

Fundus examination

(Primitive reflexes: Grasping reflex, palmomental, glabellar, sucking)

Glasgow Coma Scale

	Response	Score
Eye opening response	Spontaneously	4
	To speech	3
	To pain	2
	No response	1
Best verbal response	Oriented to time, place, and person	5
	Confused	4
	Inappropriate words	3
	Incomprehensible sounds	2
	No response	1
Best motor response	Obeys commands	6
	Moves to localized pain	5
	Flexion withdrawal from pain	4
	Abnormal flexion (decorticate)	3
	Abnormal extension (decerebrate)	2
	No response	1
Total score	Best response	15
	Comatose patient	≤8
	Totally unresponsive	3

Ottawa Ankle Rule

1 Pain around the malleolus AND

Palpation tenderness over the dorsal ridge of the lateral or medial malleus

OR

Inability of the foot to support four steps

2 Pain around the mid part of the foot AND

Palpation tenderness over the base of the 5th metatarsal bone OR the Navicular bone

OR

Inability of the foot to support four steps

X-ray of foot and lower leg if 1 or 2 are met

Otherwise: Elastic wrap, tape, possibly orthosis, information (proprioceptive exercises e.g. stand on one leg while brushing teeth)

Acute care (PRICE)

Protection, Rest, Ice, Compression, Elevation

Only applicable on adults (>18 years) with isolated injury

DVT Score

Sign	Point
Active cancer last 6 months	1p
Paralysis, paresis, newly casted	1p
Immobilized >3 d. or large surgery last 4 w.	1p
Localized tenderness along the deep venous system	1p
Whole leg swelling	1p
Calf circumference >3 cm, compared to asymptomatic side	1p
Pitting oedema on symptomatic side	1p
Collateral flow in superficial veins (non-varicose)	1p
Similar likelihood of alternative diagnosis	-2p

Low points <2 + negative D-dimer

= low probability for DVT

High points ≥ 2 → Ultrasound whole leg

Risk of false negative D-dimer when symptoms >1w or anticoagulation therapy

Distal Status - Hand

Inspection

Hematomas / Wounds

Malalignment / Tonus

Palpation

Fossa tabatière

Distal radioulnar joint

Circulation

Allen's test – Ulnar / Radial loss of circulation

Capillary refill Dig I-V

Passive movement (tendons)

Finger extension, each separately

Flexor digitorum superficialis et profundus, separately

Neurology

1. *Radialis* 2. *Medianus* 3. *Ulnaris*

Sensory

1. Dig I, radially
2. Dig II, distal of PIP
3. Dig V, ulnar side

1. Extension of fingers
2. Opposition, Dig I & V
3. F.spread / Dig V flex.

Motor

Stability

Dig I, MCP, UCL, Distal radioulnar joint

Watson's test – Instability, scaphioidum - lunatum

Specific tests

Tinel's and Phalen's tests: carpal tunnel syndrome

Finkelstein's test: Morbus de Quervain

Pain in wrist should result in plain film x-ray

- Orthopedics -

- **Empty** -

Normal Physiology

Age	RR (/min)	HR (/min)	SBP (mmHg)
0-1 m	30-60	110-160	65-90
1-12 m	30-40	110-160	70-90
1-2 y	25-35	100-150	85-95
2-5 y	25-30	95-140	80-110
5-12 y	20-25	80-120	90-110
>12 y	15-20	60-100	100-120

Age	♀ W. (kg)	♀ H. (cm)	♂ W. (kg)	♂ H. (cm)
0 m	2.8-4.2	46-54	2.9-4.4	47-55
3 m	4.6-7.0	56-64	4.8-7.5	57-66
6 m	6.0-9.3	62-71	6.4-10	63-73
1 y	8.0-12	70-80	8.5-13	71-82
5 y	15-25	102-120	15.5-25	110-112
18 y	46-80	156-180	55-94	167-194

Age (m)	1-2	2-4	4-6	6-8	8-10	10-12
W. gain (g/w)	175	150	125	100	75	50

W. (kg)	Fluids (ml/kg/24h)
2-8	150
6-10	115-120
10-10	100
10-20	50
>20	20

A. (y)	ml/kg/hour
0-1	2-4
>1	1-2
▲ Urine / Oliguri ▼	
0-1	<1
>1	<0.5

Normal Physiology

Months	Gross motor	Fine motor	Cogn. & Comm.
1-2	Lift head when prone	-	Smile in resp. to face/voice, visual preference for human face
2-3	Head steady in sitting	-	-
3-4	Lift head & chest w. ext. arms	Grasp rattle	Sustain contact, displeasure if soc. contact broken, "aah, ngah"
5-6	Roll over	Transfer objects hand to hand	Monosyllabic babble
6-7	Sit with support	-	Polysyllabic babble, vowel sounds, enjoys mirrors
7-8	Sit without support, crawl	Thumb-finger grasp	Suspicious/afraid of strangers
9-10	Pull to standing pos., walk holding furniture	Pincer grip, bang objects together.	Play peek-a-boo, wave bye-bye, respond to own name
12-18	Walk alone	Turn pages in book, scribble, build 2-cube tower	Speak a few words
4 yrs.	Walk on a straight line, jump on one leg	Button clothes	Answer questions, understand prepositions