

# Medical Reference Cards

[github.com/alping/medical-reference-cards](https://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*

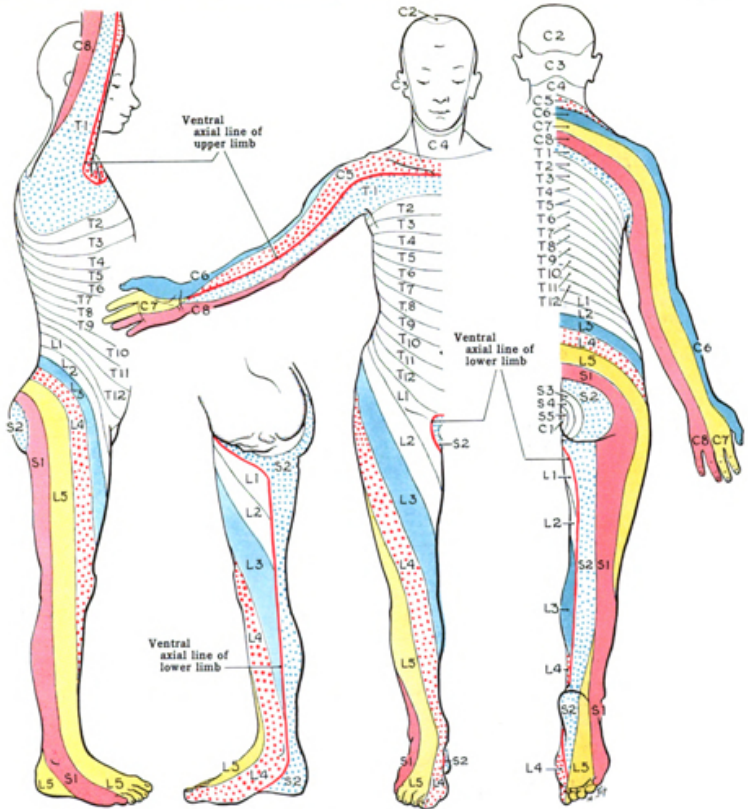
# Lab reference (Swe)

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

# Dermatomes



# Myotomes

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

# Neurological exam.

## The whole time

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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

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Walk across the room

Walk on toes/heels

Squat and rise

Sight and hearing

## Sitting

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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

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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 5<sup>th</sup> 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 exercise 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 >3d or large surgery last 4w	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  $\geq 2 \rightarrow$  Ultrasound whole leg

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

# 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	56-64	4.8-7.5	57-66
6 m	6-9.3	62-71	6.4-10	63-73
1 y	8-12	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
	0-10	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