Medical Reference Cards

github.com/alping/medical-reference-cards

Adrenal Venous Sampling

Introduction: Primary aldosteronism (PA) is more common than previously thought. Up to 15% of all hypertension is due to PA. PA can be caused by bilateral or unilateral hyperplasia, an adenoma, or by mutations in genes coding for enzymes involved in aldosterone (AS) synthesis. Adrenal venous sampling (AVS) is a procedure used to diagnose the source of the excess aldosterone (i.e. whether it is uni- or bilateral). Why is this important? Because unilateral PA is treated surgically, whereas bilateral PA is managed medically. AVS is, by far, the most reliable way of establishing the source of excess AS.

The procedure: With AVS, the difference between left and right adrenal AS excretion is measured by sampling blood from each adrenal vein (AV). This is more complicated than it sounds, mostly for anatomical reasons. The right adrenal vein is very short and originates directly from the inferior vena cava (IVC), making it very difficult to cannulate. The left AV originates from a common trunk with the inferior phrenic vein (IPV), which, in turn, originates from the left renal vein. The common trunk is easier to cannulate than the left AV itself, but dilution from the IPV must then be compensated for when interpreting the AS level (in the common trunk, left AV blood is mixed with IPV blood, which obviously has a lower AS concentration).

Adrenal Venous Sampling

Execution: The **right AV**, **IVC**, and **left AV** are cannulated, and blood is sampled for analysis of **AS** and **cortisol** levels. The AVs are catheterized through the percutaneous femoral vein approach. Gentle contrast injections are used to verify the position of the catheter tip.

• Why is blood sampled from the IVC? Why is the cortisol level analyzed? Aren't we only interested in the AS levels? These questions are answered in the interpretation section.

Interpretation: Ultimately, we're interested in whether there's a significant difference between AS levels in the two adrenal veins. So why cannulate the IVC? Because comparing the right AV and IVC cortisol levels tells us whether or not the difficult cannulation was successful – the cortisol level should be ≥3 higher in the right AV. If this is the case, we can trust subsequent measurements.

Before AS levels are compared, we must account for dilution. This is done by dividing the AS level with the cortisol level in each AV – the ratio will be the same regardless of dilution. These **corrected** values (A/C ratios) are the ones used in the final comparison.

If the A/C ratio of one adrenal vein is ≥ 4 times higher than that of the other, the source of AS is unilateral and should be treated **surgically**.

- General -

C-ABCDE

SBAR

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

Breathing

Respiratory rate Thorax movement

Auscultation Cyanosis

1. Oxygen

2. Ventilation

3. Decompression

4. Chest tube

Circulation

Colour (Pale) Cold/Sweaty

Pulse (Rad / Fem / Car)

Abdomen/Pelvis

1. Tilt bed

2. Fluids (PVC, IO, CVC)

3. Vasoactive drugs (Adrenalin IM)

Disability

AVPU/GCS Pupils

Movement of extrem.

1. Support ABC

2. Glucose

3. Antidote

Exposure

Check whole body

1. Log roll

Prevent hypothermia
Prevent further injury

2. Warm blankets

3. Warm fluids

Situation

Own name, title, and unit Patients name, sex, and age Patients social security / identification number Describe situation briefly

I'm contacting you to...

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	
Р	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
		Female >50 y.	3,1-7,9	mmol/L
В	Hemoglobin	Female	117 – 153	g/L
		Male	134 – 170	g/L
В	EVF	Female	0,350 - 0,458	
		Male	0,393 - 0,501	
В	Erytrocyter	Female	3,94 - 5,16	1012/L
		Male	4,25 - 5,71	1012/L
В	MCV		82 – 98	fL
Erc	MCH		27,1 – 33,3	pg
Erc	MCHC		317 – 357	g/L
В	Leukocyter		3,5 - 8,8	109/L
В	Trombocyter	Female	165 – 387	109/L
		Male	145 – 348	109/L

- Medicine -

Atrial Fibrillation

Types

Paroxysmal spontaneous termination within 7 days

Persistent requires cardioversion to restore sinus rhythm

Permanent sinus rhythm cannot be restored

Treatment

Freq. control goal <110/min

T Bisoprolol 2.5-5 mg

T Digoxin 0.13-0.25 mg if heart failure

Rhythm control if symtomatic

Paroxysmal T flekainid (Tambocor) 50-100 mg x2

Persistent Electrical cardioversion

AF <48 h \rightarrow no anticoagulants needed AF >48 h \rightarrow anticoagulants > 3 weeks before procedure (alternative: TEE)

Anticoagulants If CHA_2DS_2 -VASc > 2

1. NOAK, ex. dabigatran (Pradaxa)

2. Warfarin (Waran)

3. Long-term treatment with LMH

- Medicine -

Heart failure

CHA2DS2VAS

C	Cardiac - Heart failure	1
Н	Hypertension	1
Α	Age ≥ 75 years	2
D	Diabetes	1
S	Stroke / TIA / Embolism	2
V	Vascular Atherosclerotic disease	1

*No indication for antithrombotic treatment if only risk factor

Age 65-74

Sex - Female*

S

AF and score ≥2 → 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)

- Medicine -

HAS-BLED

Н	Hypertension >160 mmHg		
A	Abnormal liver or kidney*	1-2	
S	Stroke	1	
В	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

NYHA

Mortality % (untreated) after 1 resp. 5 years

			,
NYHA	Symptoms	1 y	5 y
I	Impaired heart function without symptoms	5	20
II	Shortness of breath and fatigue only during strenuous exercise	10	30
III a	Shortness of breath and fatigue during light to medium exercise	25	60
III b	III b III a, and cannot walk >200m		e as ' a
IV	Shortness of breath and fatigue at rest. Often confined to bed.	50	80

New York Heart Association (NYHA) Functional Classification

Diagnostics modalities for heart failure (HF)

Heart ultrasound (confirms the diagnosis)

ECG (normal ECG speaks strongly against HF)

Plain film X-ray (heart/lung, to exclude other conditions)

NT-proBNP (if low + ok ECG, rules out HF w. high certainty)

Lab tests (Hb, Na, K, Crea., PK, B-glucose, TSH, CRP, iron)

Heart Failure Treatment

NYHA	Treatment when EF <45%
ı	ACE inhibitor* If symptomatic oedema Diuretic
II	Beta-blocker (slow increase in dose) If EF <35% Aldosterone receptor antagonist If EF <35% and QRS >120 ms Assess need for CRT and/or ICD

III + IV Advanced treatment/palliative care.

*If not tolerated \rightarrow Angiotensin II receptor antagonist, EF = Ejection Fraction

Drug class	Example	Start (mg)	Target (mg)
ACE-Inhibitor	Enalapril	2.5 x 2	10-20 x 2
Diuretic	Furix	20 - 40	40 - 240
Beta-blocker	Bisoprolol	1.25 x 1	10 x 1
Aldosterone antagonist	Spironolakton	25 x 1	25-50 x 1
Angiotensin II antagonist	Candesartan	4-8 x 1	32 x 1

Acute heart failure (left ventricle)

Heart position

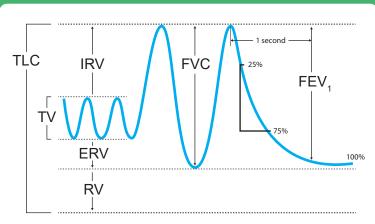
Oxygen (target SaO2 >90%) or CPAP if severe lung oedema

Furosemid (10 mg/ml 2-4 ml i.v.)

Nitroglycerin i.v. (0.25-0.5 mg) or

spray (0.4 mg) sublingually if systolic BP >100

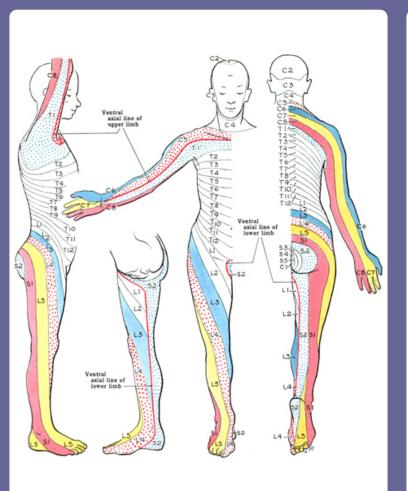
Spirometry



- Neurology -

Dermatomes

Myotomes



Segment	Function
C1/C2	Neck flexion/extension
С3	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.

Higher cerebral functions

Wakefulness, oriented to time/place/self, comprehension, attention, spatial function, dysarthria, dysphasia, dyslexia, dyspraxia, neglect, amnesia, right or left handed

Standing

/alking	Symmetry	Strength			
	Pattern	Squat and rise			
	Normal/Toes/Heels	Jump on one leg			
	Arm movements	Coordination			
	Step length	Romberg's test			
	Turning	Finger nose test			

Sensory: Visual acuity, hearing

Sitting

311	Sitting				
	Fundus examination (papillary stasis)		Symmetry		
S	Visual field (Donder's test)	a	Facial expressions		
Eyes	Movement (nystagmus, paresis, diplopia)	ä	Sensibility		
Ш	Pupil (symmetry, size, reaction to light)	ш	Motor function		
	Corneal reflex		Ptosis		
	Muscle strength (arm/finger/shoulder)	_	Symmetry		
Tests	Reflexes (brach.rad/bic/tric/patel./achill.)	¥	Tongue motor function		
	Grasset's test	Š	Swallow reflex		
	Dysdiadochokinesis, finger play	~	Gingival hyperplasia		

Lying down

Important: Neck stiffness

Muscles	Strength – proximal, distal	ج	Light touch
	Tonus* – hand/elbow/knee joint	ensibility	Vibration
	Atrophies	sig	Temperature
	Fasciculation		Pain
	Tremor	S	Proprioception
· · · · ·	Heel-knee test	ă	Grasping reflex
	Reverse Barré's test	reflex	Glabellar
	Straight leg raise	Prin.	Palmomental
	Babinski's sign	Ā	Sucking

^{*}Rigidity, gear phenomenon, spasticity

Glasgow Coma Scale

	Respone	Score
Jg (Spontaneously	4
Eye opening response	To speech	3
e op	To pain	2
Щ Уг	No response	1
	Oriented to time, place, and person	5
rbal Ise	Confused	4
Best verbal response	Inappropriate words	3
Bes	Incomprehensible sounds	2
	No response	1
	Obeys commands	6
<u>,</u>	Moves to localized pain	5
note	Flexion withdrawal from pain	4
est r espe	Flexion withdrawal from pain Abnormal flexion (decorticate)	
Ψ.	Abnormal extension (decerebrate)	2
	No response	1
– o	Best response	15
Total score	Comatose patient	≤8
г и	Totally unresponsive	3

Acute abdominal pain

Check vital signs, ABCDE
Lab: u-hCG, CRP, Hb, urinary dipstick
Gynaecological exam. and vaginal ultrasound (VU)

u-hCG positive

Spontaneous abortion: Localized pain over the uterus in combination with larger vaginal bleeding

Ectopic pregnancy (EctP): Localized pain over one side Occasionally minor vaginal bleeding Risk of intraabdominal haemorrhage

Non gynaecological: Appendicitis, urinary tract infection, gallstones

High probability of EctP if S-hCG does not double in 2 days or unable to find intrauterine pregnancy with VU when s-hCG >1000

u-hCG negative

Ovarian torsion: Acute onset of severe pain in intervals Often with cysts ≈ 5cm. Acute laparoscopic surgery

Rupture of cyst/Ovulation pain: Generalized pain in the lower abdomen (subsides within a few hours)

Infection: Pathological fluor/bleeding → Chlamydia sample + Wet smear. Doxycycline + Metronidazole

Endometriosis: Dysmenorrhea.

Clinical diagnosis (laparoscopic verification if needed)

Combined contraceptive hormone therapy (Neovletta/Prionelle), 2-4 menstruations/year

Fever Post Partum

tis	Redness, tenderness, and increased heat, in a localized area. Palpable resistance. High fever. CRP↑
Mastitis	Breast feeding (empty the breast) pump if needed Culture if wound Flukloxacillin (Heracillin) 1g x3 If abscess: Ultrasound drainage and culture.
itis	Abd. pain. Tender uterus. Malodorous bloody discharge. CRP↑
Endometritis	Cervical culture (streptococcus), blood culture Methergin + antibiotics: Within days: pip/tazo 4g x4 Late: amoxi/klav 500mg/125mg x3 + metronidazol 400mg x3 5-10d
ndi	Redness, pus
Wound infection	Wound culture Debridement
onia	Coughing, pleural pain
Pneumonia	Clinical examination, X-ray if needed If uncomplicated: PcG
ary inf.	Urinary urgency and tenderness over kidneys or bladder
Urinary tract inf.	Urine culture Antibiotics, e.g. Selexid (CAVE Furadantin)
osis	Signs of pulmonary embolus or DVT
Thrombosis	Ultrasound legs Pulmonary CT if needed
Swedish DE	: ESLUT – Bröst Endometrit Sårinfektion Lunginflammation Urinvägsinfektion Trombos

Swedish BESLUT = Bröst, Endometrit, Sårinfektion, Lunginflammation, Urinvägsinfektion, Trombos

Bishop's index

	0	1	2
Station	Above or at pelvis entrance	Above spinae	At or below spinae
Diameter (cm)	≤ 0,5	0,5< d <1,5	≥ 1,5
Effacement (%)	0	< 50	≥ 50
Consistency	Firm	Medium	Soft
Position	Posterior	Middle	Anterior

Bishop's index is a modified Bishop's score

Score < 6 = Immature cervix →
High probability of long labour if induced

Techniques used to induce labour

Intravenous prostaglandin E₁ or E₂ (Cytotec)

Vaginal prostaglandin E2

Amniotomy

Intrauterine balloon putting pressure on the cervix

Oxytocin i.v. to potentiate contractions (Syntocinon)

Local guidelines on which method to use differ between hospitals

CTG

	Base HR	Variability + Acc.	Decelerations	Contractions	
	110-150	5-25	None	≤5/10min	
Normal		≥2 acc/60 min	Uniform early		
Z			Variable uncompl. <30 s, <60 beats		
al *	100-110	<5 for >40 min, with no acc	Variable uncompl. 30-60 sec OR >60 beats	>5/10min	
Abnormal*	150-170	>25			
Ā	<100 for <3 min	<2 acc/60 min			
jic	>170	<5 for >60 min, with no acc	Variable complicated >60 sec		
Pathologic	<100 for >3min	Sinusoidal pattern	Uniform late		
<u>r</u>			Combined		
Preterminal No variability (<2/min) and no accelerations					

* ≥2 = suspected pathological

Acceleration	Increase in heart rate of >15, for >15 s
Uniform deceleration Shaped like a U	
Early	With the contraction
Late	After the contraction
Variable	Variable form (see above table)

- Orthopedics -

Ottawa Ancle 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

Well's DVT Score

Sign	Point
Active cancer last 6 months	1 p
Paralysis, paresis, newly cast	ed 1p
Immobilized >3 d. or large sur	rgery last 4 w. 1p
Localized tenderness along the venous system	ne deep 1p
Whole leg swelling	1 p
Calf circumference >3 cm, col asymptomatic side	mpared to 1p
Pitting oedema on symptomat	tic side 1p
Collateral flow in superficial ve (non-varicose)	eins 1p
Similar likelihood of alternative	e 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

- Empty -

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 superficilais 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, scaphiodeum - 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

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)						
W. gain (g/w)	175	150	125	100	75	50

W. (kg)		Fluids (ml/kg/24h)
	2-8	150
	6-10	110 - 125
.	0-10	100
Holliday- Segar	10-20	50
¥"	>20	20

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

Developmental Milestones

Age	(m)	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
9-1	10	Pull to standing, 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 y	rs.	Walk in a straight line, jump on one leg	Button clothes	Answer questions, understand prepositions
A.				

- Pediatrics -

Nutrition

- Pediatrics -

Apgar score

0-4 months

Breast milk or formula

4-6 months

Breast milk or formula

Start to introduce small amounts of vegetables, cereals

6-8 months

Breast milk or formula or gruel or cereals

Complete meal (potatoes, meat, vegetables, fruit, berries)

Cow's milk can be used in cooking, but not as a beverage

8-12 months

Two cooked meals a day

From 10-12 months of age milk as a beverage

1-2 years

Regular food

No low-fat products and/or high-fibre foods

Vitamin D supplement

5 drops every day (400 IE/day)

All children from 1 month up to at least 2 years of age

Low intake/sun exposure may need suppl. till school age

Salt intake

No extra salt added to food for children below 1 year

Food items not suitable for children below 1 year

Spinach, mangold, and beetroot – high levels of nitrate Honey – may contain C. Botulinum spores

Apgar Sign	2	1	0
Heart Rate	>100/min	>100/min	Absent
Breathing Rate and effort	Cries well	Irregular	Absent
Grimace Responsiveness or reflex irritability	Pulls away, sneezes, coughs, or cries with stimulation	Facial movement only with stimulation	Absent
Activity Muscle tone	Active, spontaneous movement	Arms and legs flexed with little movement	No movement, floppy tone
Appearance Skin colouration	Normal colour (also hands and feet are pink)	Normal colour (but hands and feet are bluish)	Bluish-grey or pale all over

This test is done to determine whether a newborn needs help breathing or is having heart trouble

Normal Results: 7-10

10 is unusual, almost all newborns lose 1 point for blue hands and feet

Abnormal results: 0-6

Signals that the baby needs medical attention

Low Apgar score is often caused by:

Difficult birth, C-section, Fluid in the baby's airway

A baby with a low Apgar score may need:

- Oxygen and clearing out the airway to help with breathing
- Physical stimulation to get the heart beating at a healthy rate

Most of the time, a low score at 1 minute is near-normal by 5 minutes

A lower Apgar score does not mean a child will have serious or long-term health problems The Apgar score is not designed to predict the future health of the child

- Pediatrics -

Vaccinations (Swe)

Age	Vaccination	Dose
3 m	Diphtheria, Tetanus, Pertussis, Polio, Hib, S. Pneumoniae	ı
5 m	Diphtheria, Tetanus, Pertussis, Polio, Hib, S. Pneumoniae	II
12 m	Diphtheria, Tetanus, Pertussis, Polio, Hib, S. Pneumoniae	III
18 m	Measles, Mumps, Rubella	I
5–6 y	Diphtheria, Tetanus, Pertussis, Polio	IV
6–8 y	Measles, Mumps, Rubella	II
10–12 y	HPV (girls born 1999 or later)	1,11,111
14–16 y	Diphtheria, Tetanus, Pertussis	V
Risk patients		-

Check-ups (Swe)

Age	Profession	Assessment/Action
0-10 d	Nurse	Home visit
2-8 w	Nurse	Growth assessment and counselling, once a week
6-8 w	Doctor, nurse	Psychomotor development
3 m	Nurse	Vaccination
3-5 m	Nurse	Growth assessment and counselling, every other week
5 m	Nurse	Vaccination
6 m	Doctor	Check-up
6-12 m	Nurse	Growth assessment and counselling, once a month
10/12 m	Doctor	Check-up
12 m	Nurse, dentist	Vaccination Dental health care information
18 m	Nurse	Vaccination
3 у	Nurse	Language development Child security information
4 y	Nurse	Vision, hearing, language, and psychomotor development Child security information
5.5 y	Doctor, nurse	Vaccination School assessment Child security information

Addiction

Drug	Half-life	Equivalent dose (mg)
Oxazepam (Sobril)	Short	15.0 - 25.0
Zopiklon / Zolpidem	Short / Short	7.5 / 10.0
Nitrazepam (Mogadon)	Short	2.5
Lorazepam (Temesta)	Short	1.0
Flunitrazepam	Short	0.5
Alprazolam (Xobril)	Short	0.25-0.5
Triazolam (Halcion)	Short	0.25

5.0

0.25

Long

Long

Benzo. Equivalents

Diazepam (Stesolid)

Klonazepam (Iktorivil)

Principles for dose-lowering		
S	Change drug to equivalent dose of Oxazepam (Sobril)	
pine	Split previous total daily dose into 5 evenly distributed doses over one day	
iaze	Decrease total daily dose by 10% per week	
poz	Start by reducing the middle-of-the-day dose, leave morning/evening till last	
Benzodiazepines	Never increase the dose! If there is an increase of withdrawal symptoms, stay on the current dose until the symptoms have stabilised	
Opiods	Change drug to equivalent dose of Kodein (Citodon)	
	Split previous total daily dose into 5 evenly distributed doses over one day	
	Decrease total daily dose by 20% / week	
	Start by reducing the middle-of-the-day dose, leave morning/evening till last	
	Never increase the dose! If there is an increase of withdrawal symptoms, stay on the current dose until the symptoms have stabilised	
	When only 4 pills left, terminate treatment	