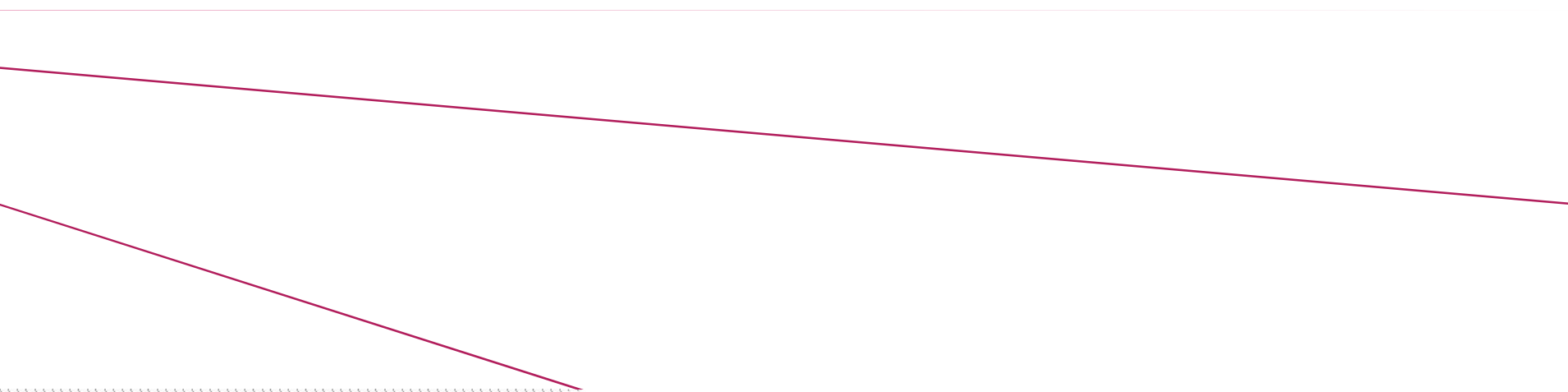


Healthy child care

Prevention is better than cure. circa podtytułu
—Desiderius Erasmus

The bottom of the slide features several decorative lines. A thin, light pink horizontal line spans the width of the slide. Below it, two solid dark red lines slope downwards from left to right. At the very bottom, a dotted dark red line is visible.

PREVENTION

- ▶ *Primary prevention* the goal is *to* avoid the development of a disease in the healthy population ,e.g. immunization
- ▶ *Secondary prevention* activities aimed at early disease detection, which increases opportunities for interventions to prevent progression of the disease e.g. screening programmes
- ▶ *Tertiary prevention* reduces the negative impact of an already existing disease by restoring function and reducing complications,e.g. physical rehabilitation

Recommendations for Preventive Pediatric Health Care(AAP)

□ Measurements

- Height and Weight(newborn-18 years)
- Head circumference(newborn- 24 months)
- Blood pressure(2 years ¹⁰⁻⁵⁻¹⁸ 10

SIDS–Sudden Infant Death

Syndrom

- ▶ From the 1994 the AAP „Back to Sleep”
- ▶ Other recommendations to reduce the risk of SIDS are:
 - avoid drugs, alcohol and smoking during pregnancy and in the presence the child
 - breastfeed
 - avoid overdressing and overheating
 - place the baby on a firm mattress, avoid cushions, pillows or stuffed toys.

Screening

- ▶ Screening is a process of identifying healthy people who may be at increased risk of a disease or condition.
- ▶ E.g. www.screening.nhs.uk).

Phenyloketonuria

- ▶ A.R. 1:10000 births

Inability to utilize phenylalanine, which accumulates in the blood and body tissues.

- ▶ Blue eyes and fairer hair and skin than other family members.
- ▶ 50% of infants may present early symptoms:
 - Vomiting,
 - Irritability,
 - Mousy odor of the urine.
 - Increased muscle tone,
 - More active muscle tendon reflexes
 - Seizures

10-5-18

Congenital hypothyroidism

- ▶ Congenital hypothyroidism is inadequate thyroid hormone production in newborns.
- ▶ 1:4000 births.

Symptoms:

- Decreased activity
- Large anterior fontanelle
- Poor appetite and failure to thrive
- Jaundice
- Constipation
- Hypotonia
- Hoarse voice, macroglossia

10-5-18

Newborn blood spot

Belgium	+CAH(congenital adrenal hyperplasia), biotinidase deficiency, CF
England	phenylketonuria (PKU), congenital hypothyroidism (CHT), sickle cell disease (SCD), cystic fibrosis (CF) and medium-chain acyl-CoA dehydrogenase deficiency (MCADD)
Europe	PKU, CHT
Germany	+CAH, galactosemia
Northern Ireland	PKU, CHT, CF, homocystinuria and tyrosinaemia
Wales	PKU, CF, CHT, Duchenne Muscular Dystrophy

Newborn screening

Advantages of newborn screening:

- ▶ Detects a serious, treatable disorder before symptoms are present
- ▶ Leads to treatment that can prevent serious problems including mental retardation and or death
- ▶ Detects carriers of certain genetic disorders

Risks of newborn screening:

- ▶ Fail to identify some children who have the condition
- ▶ Cause parental anxiety after false-positive

Screening for hearing

impairment

- ▶ One to two babies in every 1,000 are born with a hearing loss in one or both ears
- ▶ Automated Otoacoustic Emission (AOAE) screening test.
- ▶ Automated Auditory Brainstem Response (AABR) screening test.
- Reasons, other than hearing loss can cause false information from AOAE:
 - unsettled baby
 - background noise
 - fluid in the ear

The effect of hearing

impairment

- ▶ Delay in development of communication skills
- ▶ Communication difficulties lead to social isolation
- ▶ Language deficit causes learning problems
- ▶ The earlier hearing loss occurs in a child's life, the more serious the effects on the child development

- ▶ **Reaction to sounds checklist**
- ▶ **Making sounds checklist**

Developmental dysplasia of the hip

- ▶ Examination of the hips– should be performed within 72 hours after birth (Barlow and Ortolani tests).

- Dislocation
- Partial dislocation
- Instability–the femoral head comes in and out of the acetabulum
- Inadequate formation of acetabulum

Developmental dysplasia of the

Risk factors

Suggestive clinical examination

Oligohydramnios

A breech presentation at or after 36 completed weeks of pregnancy, irrespective of mode of delivery

A first degree family history of hip problems in early life

Symptoms of developmental hip dysplasia:

- ✓ limited hip abduction,
- ✓ apparent shortening of the thigh (the Galeazzi sign),
- ✓ proximal location of the greater trochanter,
- ✓ asymmetry of the gluteal or thigh folds

Treatment of developmental hip dysplasia

- Pavlik Harness
- Hip Spica Cast
- OR SURGERY...

Cryptorchidism

- ▶ The congenital undescended testis should be treated surgically by 9–15 months
- ▶ Consequences : infertility, testicular malignancy, hernia, torsion of the cryptorchid testis.
- ▶ Male newborn with bilateral nonpalpable testes could be a virilized female with congenital adrenal hyperplasia

Screening for ophthalmic problems
(newborn, 6–8 weeks, pre–school, school–
aged)

▶ **Strabismus– Test of
corneal light reflex**

– **Cover**

test(an object 30–

50 cm at the eye level

10–5–18

ROP(Retinopathy of

prematurity)

- ▶ Infants with a birth weight of less than 1500 g or gestational age of 32 weeks or less (as defined by the attending neonatologist)using binocular indirect ophthalmoscopy to detect ROP.
- ▶ 4–6 wk of chronological age or at 31–33 wk postconceptional age.
- ▶ Follow–up 2 wk or less

A.A.P.

10-5-18

Screening for hypertension

- ▶ Blood pressure measurements should be part of the routine physical examination of all children 3 yr or older
- ▶ The inflatable bladder should cover at least of the upper arm length and 80–100% of its circumference. A cuff that is too short or narrow artificially increases blood pressure readings.
- ▶ Should be obtained in all 4 extremities to detect coarctation of the aorta
- ▶ Hypertension – the blood pressure which is above the 95th percentile for age (requires

Conditions associated with hypertension

RENAL

Hemolytic– Uremic Syndrome, Pyelonephritis, Multicystic kidney, Acute postinfectious glomerulonephritis, Vesicouretral reflux nephropathy, Renal tumors

DRUGS AND POISONING

Cocaine, Oral contraceptives, Amphetamine, Corticosteroids and adrenocorticotrophic hormone, Vit D intoxication

CENTRAL AND AUTONOMIC NERVOUS SYSTEM

Intracranial mass/ hemorrhage, Increased intracranial pressure, Encephalitis

VASCULAR

Coarctation of thoracic or abdominal aorta, Renal artery lesions

ENDOCRINE

Hyperthyroidism, Hyperparathyroidism, Congenital Adrenal Hyperplasia, Cushing Syndrome, Pheochromocytoma

The doctor of the future will give no medicine, but will educate his patients in the care of the human frame, in diet, and in the cause and prevention of disease. Thomas A. Edison(1847–1931)

Health is not simply the
Hannah Green

