

Prematurity

PSY 417
Schuetze

Prematurity

- Before 37th week of gestation
- 7-10% of all live births
- Extreme prematurity: Before 28th week gestation
- <http://www.youtube.com/watch?v=JsFT1xEIHzM&NR=1&feature=fvwp>

Etiology

- Maternal age
- Poor nutrition
- Inadequate prenatal care
- Substance use
- Toxemia
- Previous pregnancies
- Weak cervical muscles: incompetent cervix
- Multiple births
- Maternal infections
- Congenital malformations

Physical Appearance



Lanugo



Skin Color

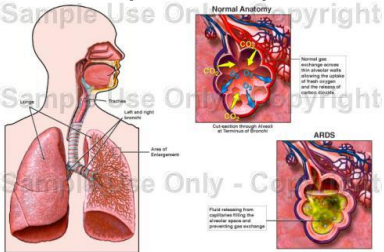


Complications

- Respiratory Distress Syndrome (RDS)
 - surfactant
- Bronchopulmonary Dysplasia
- Intracerebral Insults
- SIDS
- Retinopathy of Prematurity

Acute Respiratory Distress Syndrome (ARDS)

RDS



Prognosis - survival

- < 800 grams
 - 1977 – 20% survival rate
 - 1990 – 40% survival rate
- > 800 grams – 90% survival
- 28 weeks – 80% survival

Prognosis - developmental

- <http://www.youtube.com/watch?v=Ncxlp5e-5oU&feature=Playlist&p=96630BC69007A739&index=0&playnext=1>
- More than 50% born at 25 weeks have learning difficulties or problems with eyesight and hearing

- 12-32% - CP or MR
- 5-25% - visual impairments
- 5-12% - hearing impairments
- 20-30% ADHD
- 50% - learning disorders

Behavioral Characteristics

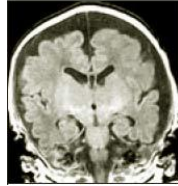
- Sleep
 - Increased total sleep
 - Wake more frequently
 - 23-27 weeks
 - States are diffuse
 - Jerky movements, tremors
 - Irregular RR and HR
 - Infrequent crying
 - 30-37 weeks
 - Gradual development of quiet sleep
 - More regular respiration

Behavioral Characteristics

- Feeding
- Reflexes
 - 28 weeks: Can elicit slow rooting, sucking, swallowing reflexes
 - 34 weeks: Become coordinated

Brain Development

- The more premature, the slower it develops “nooks and crannies”
 - surface area for neural connections
 - 30% less gray matter (thinking)
 - 40% less white matter (fiber connections)



Brain Development

- <http://www.youtube.com/watch?v=c-dmwKJS-fs>
