**Introduction**

- **Pediatrics** means the Science of Child care and Scientific treatment of Childhood disease.
- **Abraham Jacob** is Know as "Father of Pediatrics".

**New Born ( Neonate ) :-**

From birth to 28 days ( 4 Weeks ) of Age.

- **Early Neonate Period** :- from birth to 7 days of life.
- **Late Neonate Period** :- from 7th days to 28th days of life.

**Classification of newborn**

- **Classification by Gestational Age**
  - Preterm  < 37 wks
  - Full term  37-4
  - Postterm  > 42 Wks

- **Classification By Birth Weight**
  - Low Birth Weight < 2500 g
  - Very Low birth weight < 1500 g
  - Extreme low birth weight < 1000 g

**Assessment & Intervention of NewBorn :-**

- **1st Assessment** in the Newborn is *initiation of Respiration*.

**Intervention :-**

1. **Suctioning :-**

   - **Suctioning** में Mucous Aspiration को रोकने के लिए, पहले mouth की तथा उसके बाद Nose की Suctioning करनी चाहिए
   - **Time Duration :- ** 10 - 15 second
   - **Suction Pressure is 60 - 80 mm of Hg.**
   - **In Case of preterm NewBorn pressure is 40 - 60 mm of Hg**
2. Umbilical Cord cutting :-
   - पहला clamp Umbilicus से 2.5 cm की दूरी पर एवं दूसरा Clamp Umbilicus से 5 cm की दूरी पर लगाने के बाद, Umbilicus cord को बीच में से काट देतें हैं

3. Apgar Scoring :-
   - 5 characteristics are assess in Apgar Scoring.
     1. Appearance ( Skin Colour )
     2. Pulse ( Heart Rate )
     3. Grimace ( Reflex Response )
     4. Activity ( Muscle tone )
     5. Respiratory efforts

**APGAR Score**

<table>
<thead>
<tr>
<th>Score</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Rate</td>
<td>Absent</td>
<td>&lt;100bpm</td>
<td>&gt;100bpm</td>
</tr>
<tr>
<td>Respiratory effort</td>
<td>Absent, irregular</td>
<td>Slow, crying</td>
<td>Good</td>
</tr>
<tr>
<td>Muscle tone</td>
<td>Limp</td>
<td>Some flexion of</td>
<td>Active motion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>extremities</td>
<td></td>
</tr>
<tr>
<td>Reflex irritability (nose suction)</td>
<td>No response</td>
<td>Grimace</td>
<td>Cough or sneeze</td>
</tr>
<tr>
<td>Color</td>
<td>Blue, pale</td>
<td>Acrocyanosis</td>
<td>Completely pink</td>
</tr>
</tbody>
</table>

- Mild distress or No distress :- 8 - 10 Normal routine care.
- Moderate distress :- 4 - 7 ( O₂ therapy )
- Severe distress :- 0 - 3 immediate Resuscitation
Total No. Of Fontanell :- 6
Anterior Fontanell - 1
Posterior Fontanell - 1
Mastoid - 2
Sphenoid - 2

<table>
<thead>
<tr>
<th></th>
<th>Anterior Fontanell</th>
<th>Posterior Fontanell</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Also called Bregma</td>
<td>Also called Lambda</td>
</tr>
<tr>
<td>2.</td>
<td>Diamond Shape</td>
<td>Triangular shaped</td>
</tr>
<tr>
<td>3.</td>
<td>Diameter 2 - 4 cm</td>
<td>Diameter 1 - 1.5 cm</td>
</tr>
<tr>
<td>4.</td>
<td>Fuse at 12 - 18 month of Age</td>
<td>Fuse at 6 week of Age</td>
</tr>
</tbody>
</table>

Moulding :-
- Overlapping of Cranial bones to pass through the bony pelvis.
- It Resolve within 72 hours.

Asses for Epstein Pearl and Oral Thrush in Mouth :-
Assess करने के लिए एक Gauze piece लेते हैं और इससे newborn के mouth में white patch को remove करते हैं
  - Epstein Pearl :- जब white patch बिना दर्द किये Remove हो जाते हैं तब ये Epstein pearl को indicate करते हैं
  - Oral Thrush :- white patch remove नहीं होते हैं और दर्द करने लगते हैं तो यह Oral thrush को indicate करता है

Torticollis :- twisting of neck toward one side due to damage in 11th Cranial nerve (Accessory Nerve). The Condition also known as Wry neck and loxia.

Eye :-
1. Ophthalmia neonatorum :- Nesseria gonococcus
2. Neonatal Conjunctivitis :- Chalamydia trachomatis
   - Eye drop use - Erythromycin
   - PERRLA :- Pupil Equal Round Reactive to Light and Accommodation
Skin :-

- **Vernix Caseosa** :- (a cheesy white substance) Present on the entire body in Preterm NewBorn.

- **Lanugo** :- fine Body hair

  - Hypothermia also known as Silent killer of NewBorn.

- Start Breast feeding as early as possible in a normal delivery within half a hour and in Caesarian section within 4 hour.

- IM injection in infant - Vastus lateralis. (Administer Vit. K in 0.5 mg).

- Normal Blood Glucose level in Neonate :-
  - 40 - 60 mg/dl during first 3 days.

**Caput Succedanum & Cephalhematoma :-**

<table>
<thead>
<tr>
<th></th>
<th>Caput Succedanum</th>
<th>Cephal hematoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Due to improper Venous drainage</td>
<td>Due to Rupture of minor emissary vein.</td>
</tr>
<tr>
<td>2.</td>
<td>Accumulation of Fluid</td>
<td>Accumulation of Blood</td>
</tr>
<tr>
<td>3.</td>
<td>Can cross suture line</td>
<td>Cannot cross suture line</td>
</tr>
<tr>
<td>4.</td>
<td>Spontaneously resolves within 72 hours.</td>
<td>May require Spontaneously or may require incision and drainage.</td>
</tr>
</tbody>
</table>