



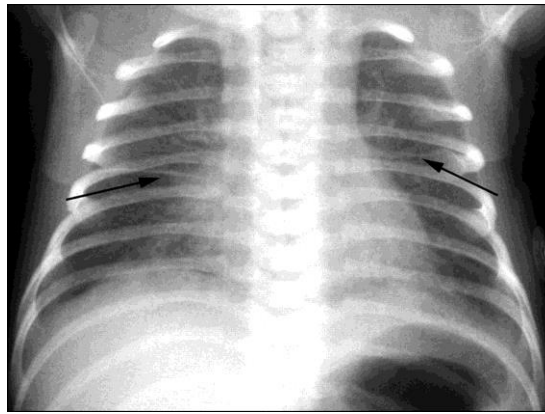
- **Case 1:** a 32 weeks preterm developed RDS 4 hours after delivery. Chest X-ray shows: Pulmonary bronchogram, ground-glass appearance and small lung volumes (as seen in the image below):



- **How would you manage this case?**
 - ✓ Mechanical ventilation.
 - ✓ Oxygen supplementation.
 - ✓ Broad-spectrum antibiotics (ampicillin + gentamicin) because sometimes it is difficult to differentiate RDS from pneumonia.
 - ✓ Most specific management: natural surfactant (which is obtained from pigs or sheep lungs).
- **Case 2:** tension pneumothorax in the left side with chest X-ray showing shift of mediastinum, presence of air in the pleura and collapsed left lung (as seen in the image below):



- **How would you manage this case?**
 - ✓ Aspiration of air by inserting the needle in 2nd intercostal space of mid-clavicular line.
 - ✓ Insertion of a chest tube in the 5th intercostals space of axillary line for slow drainage under water seal.
- **Case 3:** a term who was born via CS and developed the following after 6 hours of delivery: tachypnea (80 breaths/ minute), mild intercostals retraction, normal oxygen saturation and ABG is normal.
 - **Chest X-ray features (as seen in the image in nest page):**
 - ✓ Costophrenic angle is unclear.
 - ✓ Increased vascularity of lungs (star burst appearance).
 - ✓ Relative cardiomegaly.
 - ✓ Accumulation of fluid in lung fissures.



- **How would you manage this case?**
 - ✓ There will be a spontaneous recovery after 48 hours.
- **Case 4:** a term baby with cyanosis, tachypnea and retractions. Chest X-ray shows non-homogenous opacity of lungs.



- **What is your differential diagnosis?**
 - ✓ Congenital pneumonia.
 - ✓ Meconium aspiration syndrome.
 - ✓ Pulmonary hemorrhage.
- **If the case represents congenital pneumonia:**
 - ✓ Most common pathogens are: GBS, Gram (-) bacteria and Listeria monocytogens.
 - ✓ The case is managed with antibiotics and surfactant (due to secondary surfactant deficiency).
- **If the case represents meconium aspiration syndrome:**
 - ✓ History: meconium-stained liquor (which occurs in 10% of pregnancies and result in aspiration in 1% of cases).
 - ✓ Aspiration most commonly occurs intrauterine rather during delivery.
 - ✓ Surfactant will be given but meconium suction will only be done when resuscitation is done and still the chest is not rising.
 - ✓ Notice that these patients are at higher risk of developing bronchial asthma later.
- **If the case represents pulmonary hemorrhage:**
 - ✓ Management:
 - ❖ High frequency ventilation (why?) → because this will let the lung to distend without shearing forces of inspiration and expiration. In addition, this will also work as a tamponade.
 - ❖ Vasoconstriction through adrenaline.
 - ❖ Activated factor VII



- **Case 5:** chronic lung disease.
 - ✓ The preterm will still need oxygen until reaching 36 weeks of age.
 - ✓ Treatment: Local steroids, prevention of infections, good nutrition and diuretics.
 - ✓ Prevention: by preventing prematurity, administering antenatal corticosteroids and avoiding intubation of each premature baby unless needed.
- **Case 6:** a 6 months infant presents to your clinic with the following spots which are non-tender, not rising above the surface of the skin and has a homogenous color (no different stages of colors such as seen with bruises).



- **What is your diagnosis?**

- ✓ Mongolian spots: which occur due to increased production of melanin and are seen especially on the back and legs.
- ✓ There is no management and these spots will remain.
- **Case 7:** an infant presents to your clinic with the following:



- **What is your diagnosis?**

- ✓ Salmon patch (capillary hemangioma). It is considered as a birth mark and is seen on eyelids, occiput and forehead. It is a benign condition and parents should be reassured. Also, you need to screen and make sure that there are no internal hemangiomas.
- ✓ Notice that capillary venous hemangiomas are deep-seated and need to be treated because they can affect the function of an organ. How to treat them?
 - ❖ Propranolol, if not working:
 - ❖ Interferon or laser.
- **Case 8:** a 2 days old newborn develops maculopapular rash. He is active with no complications.





- **What is your diagnosis?**

- ✓ Erythema toxicum: which is considered as the first reaction of the body to the environment. It is a benign condition which will spread within 24 hours but will disappear within 72 hours.

- Case 9: an infant presents to your clinic with the following:



- **What is your diagnosis?**

- ✓ Milium: tension of sebaceous glands. This is a benign condition which doesn't require intervention and is most commonly seen on forehead and nose.

- Case 10: you must differentiate between cephalohematoma and caput succedaneum:



	Caput succedaneum	Cephalohematoma
Nature	Subcutaneous, extraperiosteal fluid collection, occasionally hemorrhagic	Sub-periosteal blood collection
Onset	Immediately after birth	Few hours after birth
Site	Over the presenting part	Any bone (commonly parietal or occipital)
Extent	Diffuse (crossing suture lines)	Localized (not crossing suture lines)
Consistency	Soft	Firm
Fate	Usually disappears gradually within few days	Resolves spontaneously over 8 weeks (infection, calcification or ossification may rarely occur)

- Case 11: an infant presents to your clinic with the following:



- **What is your diagnosis?**



- ✓ Umbilical hernia: which usually disappears by itself but if there is a large umbilical hernia which doesn't disappear by 5 years of age → surgical correction.

- Case 12: a baby is born with the following:



- **What is your diagnosis?**
 - ✓ Omphalocele (herniation from the umbilicus). This condition is associated with other defects such as polysplenia or dextrocardia thus you must screen for the presence of other congenital anomalies.
- **Management:**
 - ✓ Create a plastic bag and hang the protruding part until it is reduced manually then correct the remaining through surgery. Notice that these babies have increased risk for infections.

- Case 13: a baby is born with the following:



- **What is your diagnosis?**
 - ✓ Gastroschisis (a defect in the anterior abdominal wall) which needs emergency surgery.

- Case 14: you need to know the difference between Erb's palsy and klumpke's palsy

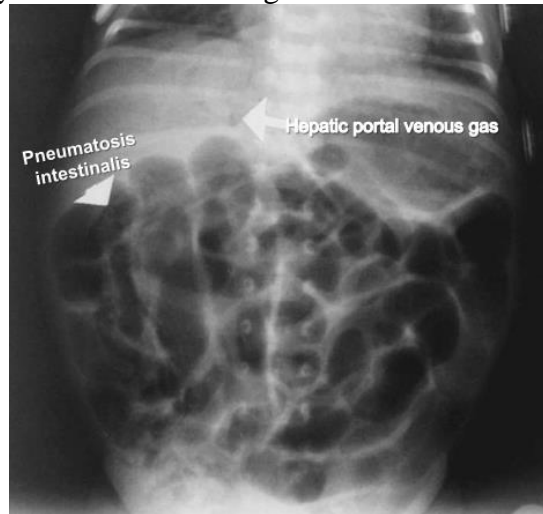


	Erb's palsy	Klumpke's palsy
Affected muscles	<ul style="list-style-type: none"> • Deltoid: loss of abduction. • Supra and infraspinatus: loss of external rotation • Biceps and supinator: loss of supination The net result will be adduction, internal rotation and pronation (waiter's tip hand) 	Paralysis of all intrinsic muscles of the hand
Reflexes	<ul style="list-style-type: none"> • Absent Moro reflex on the affected side 	Absent grasp reflex on the affected side
Prognosis	<ul style="list-style-type: none"> • If nerve roots are intact, full recovery will occur in more than 90% by 3 months. 	

- If no improvement within 3 months, consult a neurosurgery for nerve grating or neuroplasty.



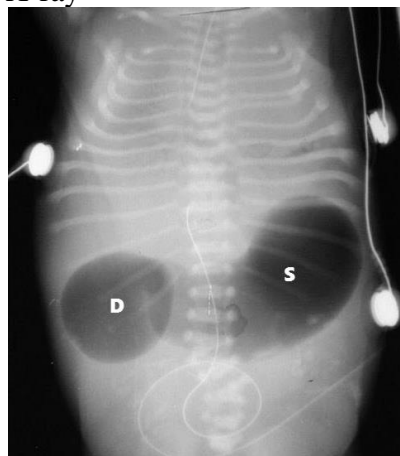
- **Case 15:** a 2 weeks old preterm who presents with abdominal distention and bloody stool. Abdominal X-ray shows the following:



- **Pneumatosis intestinalis:** gas in the intestinal wall.
- **Intrahepatic portal venous gas.**
- **Pneumo-peritoneum (gas under the diaphragm)** → if perforation occurs.
- **What is your diagnosis:** necrotizing enterocolitis.
- **Case 16:** from the following X-ray



- **What is your diagnosis?**
 - ✓ Diaphragmatic hernia.
- **How would you manage this case?**
 - ✓ Intubate the patient; stabilize his condition and correct the defect by surgery.
- **Case 17:** from the following X-ray



- **What is your diagnosis?**

- ✓ Double-bubble sign seen with duodenal atresia. This condition is corrected through surgery and Down syndrome must be ruled-out.