Jaundice History (Paediatrics) #1

PATIENT INFORMATION

Ella is a 3-day old newborn. She was born at 35 weeks. During her stay in the special care nursery the nurses have noted Ella has become ‘yellow’.

CANDIDATE INSTRUCTIONS

You will have **8 minutes** to perform the following:

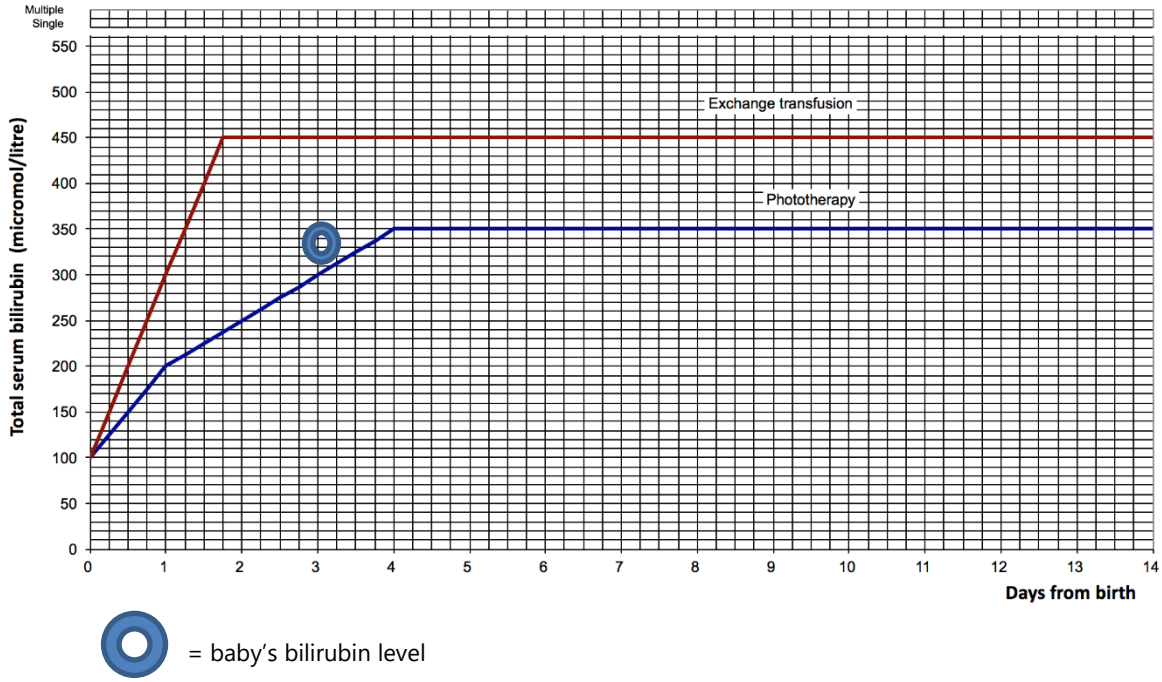
1. Take a brief focused history from her mother, Jane (4 minutes).
2. State what investigations you would like to order (1 minute).
3. Interpret these investigations (1 minute).
4. Counsel Jane on Ella’s diagnosis and your planned management (2 minutes).

TASK 1 – HISTORY (TIMING E.G. 3 MINUTES)		MARKS
History of presenting complaint	• Opening statement - “She’s been completely fine doctor. The midwife thinks that she is a bit too yellow.” • What - yellowing started on the face, now on the trunk and limbs • When – “started on about the 2nd day, has been getting worse” • Quality – “deeply jaundiced” according to the midwife • Quantity – N/A • Associated symptoms – **no** lethargy, **no** poor feeding, **no** seizures or arching of back, head and neck • Aggravating/alleviating factors - N/A • Beliefs/concerns – “don’t know what’s wrong, I’m worried it’s something bad!”	/3
Systems review/associated symptoms	Symptoms and risk factors that are present are in **BOLD.** <u>Causes of jaundice after 24 hours:</u> • Haemolysis: Mother’s blood group is A+. No family history of G6PD, thalassaemia or hereditary spherocytosis • Sepsis: No fever, no drowsiness, no pallor, no breathing difficulty, TORCH screen negative • Dehydration: feeding on breast milk but also via NGT feeds to top her up, feeding every 3-4 hours, no obvious bruising • Hypothyroidism – negative on Guthrie card • Biliary atresia – passed meconium at 12 hours of life, no vomiting, no abdominal distention <u>Signs of kernicterus</u> • No lethargy • No seizures • No arching of back, head or neck (opisthotonos) **Marking criteria** Full marks for assessing symptoms/risk factors of 4 potential causes 2 marks for assessing symptoms/risk factors of 3 potential causes 1 mark for assessing symptoms/risk factors of 1-2 potential causes	/3
Birthing History	• Normal pregnancy • No evident reason for prematurity • Normal vaginal birth • No complications during birth • Kept in special care nursery for feeding, low early onset sepsis risk	/2
Medications	• None	/0.5

Allergies	• None known	/0.5
Family history	• Other sister was jaundiced at birth too • Otherwise no relevant family history	/1
Social history	• Two parents and one older sister • No history of alcohol or drug use during pregnancy	/1
TASK 2 – Investigations – request and interpret (2 MINUTES)		
Requested investigations	• Serum bilirubin (conjugated and unconjugated) • FBE • Blood film • Coombs test • Septic screen • TFTs • LFTs	/2
Interpretation of diagnosis (see investigations on next page)	• High unconjugated bilirubin with a normal conjugated bilirubin • All other investigations are normal ruling out any worrying causes of jaundice • Bilirubin chart indicates the jaundice is severe enough to warrant treatment	/2
TASK 3 – Counselling/management plan (2 MINUTES)		
Counselling	• Diagnosis – physiological jaundice • What is it? – cause of jaundice because the older foetal haemoglobin/red blood cells are broken down but a babies liver is not good enough to clear the bilirubin adequately. • Why their baby has it/is it common – it is very common, particularly in preterm babies. • Is it dangerous? It isn't dangerous in the majority of cases. When the levels get too high, we worry about the bilirubin crossing into the brain. This means we treat it if the levels get too high. • Management – Can use a Bili blanket or phototherapy. Both have the same mechanism – the light helps convert the unconjugated bilirubin into a water-soluble form that can be excreted from the body.	/5
	TOTAL	**/20**

Investigations

Bilirubin chart



FBE – Haemoglobin **-** 178g/L (normal range – 140-240g/L), WCC – 6x10^9/L (5-10x10^0/L), Platelets – 200 (150-450)
Blood film - NAD
LFTs – NAD except bilirubin levels (see below)
Bilirubin levels – Total serum bilirubin 300ng/L (normal range <250). Conjugated bilirubin levels – normal. Unconjugated bilirubin levels - elevated
TFTs – TSH – 5mlU/L (normal range <10mlU/L)
Coombs test - NAD