Table 1 Liver function and calcium levels

Age (weeks)	6	8	17	22	45	57	Reference range
Total bilirubin ($\mu\text{mol/l}$)	229	257	109	20	6	<5	0–20 $\mu\text{mol/l}$
Conjugated bilirubin ($\mu\text{mol/l}$)	185	226	87	NA	<5	<5	0–20 $\mu\text{mol/l}$
AST (U/l)	178	473	148	581	134	66	15–45 U/l
ALT (U/l)	185	305	158	774	120	69	10–40 U/l
Serum calcium (mmol/l)	2.58	2.68	2.83	2.53	3.81	2.75	2.20–2.70 mmol/l
Serum albumin (g/l)	35	37	39	39	47	40	30–45 g/l

NA, not available.

all cases of supra-valvular aortic stenosis or pulmonary branch stenosis, the correct diagnosis would have been established earlier. We also emphasise the importance of being aware of the calcium levels in cases of presumed Alagille syndrome, particularly those in which not all clinical features are present. In addition, our report of biliary hypoplasia in this case further extends the phenotype of Williams syndrome.

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IMAGES IN PAEDIATRICS

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Pneumothorax after a roller coaster ride

Shortly after enjoying a roller coaster ride at an amusement park, this 16 year old boy felt a sharp pain in his chest and experienced some difficulty in breathing. Ten days later he was brought to the A&E department by his mother for evaluation, because of persistent pain and difficulty in breathing. He was a non-smoker and had previously been fit and healthy.

At 170.9 cm, his height was on 50th centile and he had no marfanoid features. On examination, there was no respiratory distress but the air entry was reduced on the right side. Chest x ray examination confirmed pneumothorax on the right side (fig 1). He was given 100% oxygen for a couple of hours to aid resolution of the pneumothorax. A week later there was little change in his chest x ray findings; however, by 2 weeks there was a complete resolution of the pneumothorax.

There have been no previous citations of occurrence of spontaneous pneumothorax after roller coaster rides, but occurrence of pneumothoraces in previously healthy lungs has been described in relation to sudden pressure changes¹ and exposure to loud music.² In our case it seems to be a combination of both.

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Figure 1 Chest radiograph showing pneumothorax.

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