Medical Case Study Example

A 74-year-old woman had her LFTs checked routinely as part of her annual hypertension screen. Her LFTs showed a raised GGT and ALP of 92 and 184 respectively.

Her past medical history consisted of sciatica, hypothyroidism, mild depression and psoriasis. Her medications included amiloride 5mg once daily, atenolol 50mg at night, calcipitriol, furosemide 40mg once daily, sertraline 50mg once daily and levothyroxine.

She did not drink alcohol and had never taken statins or other medications potentially affecting her LFTs, however she did report a history of a blood transfusion many years ago and she thought that her mother had possibly had 'liver cancer' but the details around this were unclear.

The patient denied any abdominal pain and there were no stigmata of chronic liver disease noted. She was a smoker. She had reported some fatigue for a couple of months but her hypothyroidism was not under control and recent adjustments had been made to her thyroxine in order to normalise her TSH.

Repeat LFTs showed an increasing ALP (196) and GGT (135). Based on this an ultrasound and full liver screen was organised. The ultrasound scan was reported as normal.

The liver screen revealed a positive M2 and antimitochondrial antibody. Her cholesterol was also high at 7.5. Her CV risk suggested she should be started on a statin.

After discussion with the local biochemist, we agreed to commence a low dosage of pravastatin and monitor her LFTs. If the LFTs were to deteriorate on the statin, then ezetimibe was to be considered.

The patient was subsequently referred to the hepatology department with primary biliary cirrhosis (PBC) and appropriate treatment was commenced.

Discussion

Primary biliary cirrhosis, also known as primary biliary cholangitis has an estimated prevalence of 12.9 per 100,000 population. It is more common in females around the fifth decade of life.1,2

Fatigue is the commonest symptom but other symptoms can include pruritus, jaundice and right upper quadrant pain. Stigmata of chronic liver disease may be seen on examination.

It is often diagnosed following further investigation of abnormal LFTs, namely raised ALP and GGT, as the disease involves the biliary tree. Antimitochondrial antibody is highly specific for the condition. There is a strong association with other autoimmune conditions, particularly thyroid disease. Raised cholesterols are also seen.

Other primary care investigations include an ultrasound scan of the abdomen to look for other causes of the deranged LFTs and to see if there is evidence of cirrhosis.

Further investigations in secondary care may involve CT or MRI scanning. A liver biopsy may also be indicated to stage the disease.

Treatment is focused around slowing the progression of the disease and alleviating symptoms. Fatigue is difficult to treat, however pruritus can be managed with sedating antihistamines, emollients and bile salt sequestrants to prevent bile salt deposition in the skin.

Ursodeoxycholic acid is used to slow down the progression of the disease with mixed reports as to whether they improve mortality. Other treatments involve altering the autoimmune component of the condition with methotrexate, for example.

Transplant is also an option, however the autoimmune process affects the transplanted liver and other problems such as rejection are likely.