Isolated Rise in ALP in Asymptomatic Adults

Predominant rise in ALP is suggestive of biliary or infiltrative disease

ALP

- has two main sources in the non-pregnant adult: liver and bone. Higher ALP activities are also seen as a normal variant and are associated with a range of medical conditions (congestive heart failure, hyperthyroidism, pregnancy and intrahepatic cholestasis during sepsis) and certain drugs (ibuprofen, paracetamol, cefotaxime).
- Liver and bone profiles should be checked if not already carried out, to exclude other raised indices.
- Isolated raised values up to approximately 145 IU/I are more likely to reflect a statistical rather than clinical finding.
- Although the reference range for women rises with age, the prevalence of primary biliary cirrhosis also rises. Measurement of anti-mitochondrial antibodies in cases of persistently increased ALP >200 of liver origin would therefore seem appropriate.

Raised

ALP without a concomitant rise in GGT in a non-pregnant adult is likely to be of bone origin. If doubt still exists ALP isoenzyme analysis is useful e.g. if co-incidentally on enzyme inducing drugs which elevate GGT.