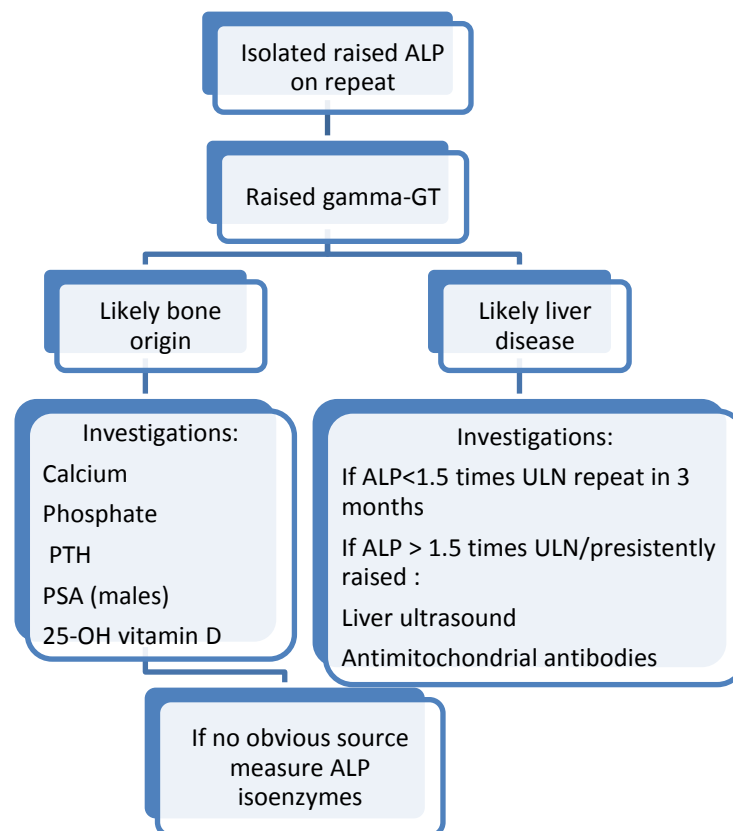


Local Guidance on the Investigation of an Unexpected, Isolated Raised Alkaline Phosphatase (ALP)

Introduction:

- The two main sources of ALP are from liver or bone. However, other sources include intestinal and placental ALP.
- Consider:
 - Age – children and adolescents have age related reference ranges, however levels can be slightly higher during a growth spurt
 - Pregnancy – up to 2-4 fold higher than upper limit of normal in third trimester
- The first link of investigation is to determine the source of ALP. Measurement of gamma-GT is suggested and raised levels indicate a hepatic rather than bone origin.
- An isolated raised ALP typically indicates a bone origin, therefore we suggest to follow-up with bone profile, vitamin D and PTH (particularly if the patient has a normal gamma-GT level).
- We suggest the following algorithm:



1. REFERENCES

Shipman KE et al. Interpreting an isolated raised serum alkaline phosphatase level in an asymptomatic patient. BMJ 2013 April 3; 346:f976 <https://www.bmj.com/content/346/bmj.f976>

ACB Venture Publications: Primary Care and Laboratory Medicine 2010