

# Transaminitis in Duchenne's Muscular Dystrophy

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## Abstract

**Background:** Persistently raised transaminase levels often prompt the clinician to investigate for liver pathology. Previously, some of our patients with Duchenne's muscular dystrophy have had investigations to look for liver disorders when the alanine transaminases (ALTs) were found incidentally to be high. **Aim:** The objective of the study was to ascertain the levels of the transaminases in patients with Duchenne's muscular dystrophy and to see if the levels of transaminases correlated with muscle enzymes such as creatine kinase (CK). **Materials and Methods:** This is a case series of 19 patients with Duchenne's muscular dystrophy. Alanine and aspartate transaminase (AST) levels and CK levels were measured in the serum of the patients. **Results:** In this series, ALT and AST levels were all found to be raised significantly in patients with biopsy-proven Duchenne's muscular dystrophy and Becker's muscular dystrophy. Alanine transaminase, in particular, was raised to a mean of 356 mmol/L, 9 times above the mean for normal. There was also good correlation between ALT and CK levels with a correlation coefficient of  $r = 0.80$  and P value 0.01. Similar to CK, the transaminase levels were inversely proportional to mobility and to age. **Conclusion:** The presence of hypertransaminasemia in patients with muscular dystrophy should be attributed to muscle breakdown rather than to liver pathology and such patients should not be over-investigated for liver disease. In the absence of liver pathology, raised transaminases may be an early sign of occult muscular dystrophy and such patients should have CK levels checked to look for evidence of muscular dystrophy

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**Key words:** Alanine transaminase, Aspartate transaminase, Creatine kinase, Duchenne's muscular dystrophy

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