

# Abstract

Pract Neurol. 2009 Feb;9(1):37-41.

## Functional vitamin B12 deficiency.

Turner MR, Talbot K.

Department of Neurology, John Radcliffe Hospital, University of Oxford, Oxford, UK.

**SUMMARY:** We describe a case of functional vitamin B12 deficiency where the repeated measurement of a serum B12 level within the normal range led to delay in the diagnosis of subacute combined degeneration of the spinal cord, and possibly permanent neurological damage as a result.

**DISCUSSION:** Failure of intracellular transport of B12 by transcobalamin-2 can lead to functional B12 deficiency but with apparently normal serum levels, and is suggested by raised levels of either serum methylmalonic acid or homocysteine, associated with low levels of transcobalamin-2.

**CONCLUSION:** Such patients may respond to repeated high-dose injections of B12.

PMID: 19151237

