

## ABSTRACT

The mutations in  $\beta$ -globin gene from 6 Thai patients with previously uncharacterized  $\beta$ -thalassemia/HbE disease were studied using a RNase protection assay. The results showed that one of the patient had a mutation in the region of codons 41-42. Direct DNA sequencing of the amplified  $\beta$ -globin gene identified a cytidine deletion in codon 41 (TTC  $\rightarrow$  TT) causing a frameshift mutation and resulting a premature termination at codon 60/61. This is the first report of this type of rare  $\beta$ -globin gene mutation in conjunction with HbE.