Evidence of intra- familial of \textit{Helicobacter pylori} by PCR- based RAPD fingerprinting in Vietnam

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Statement of the problem: \textit{Helicobacter pylorus (H. pylori)} is the major cause of gastritis and peptic ulcer disease in children. Transmission between family members could be increasing risks of reinfection in children. The objective of this study is to assess transmission by DNA fingerprinting analysis of \textit{H. pylori} culture from pediatric patients and their family members.

Methodology & Theoretical Orientation: We selected 17 households with \textit{H. pylori} patients. 50 \textit{H. pylori} strains were isolated from patients and family members, of whom 17 were from pediatric patients, 33 from family members including fathers, mothers and brothers/sisters. All 50 \textit{H. pylori} strains were analyzed by RAPD technique from January, 2012 through September, 2013 in National hospital of pediatrics, Hanoi, Vietnam.

Findings: Results show that 46.1% (6/13) mothers had genotypes similar to the ones of their children. In contrast, only 8.3% (1/12) fathers had genotypes similar to the ones of their children. 11.8% (2/17) \textit{H. pylori} strains of pediatric patients were similar to the ones of their brothers/sisters. However, only one strain of fathers and mothers have similar genes but are not identical to their offspring.

Conclusion & Significance: The results show that there is a link between the mother-to-child isolate, which may be evidence of mother-to-child transmission, especially in young children. The results of our study provide further proof of the molecular level of \textit{H. pylori} transmission between family members in Vietnam. Further studies on \textit{H. pylori} transmission among family members with larger sample sizes are needed.

Biography
Thi-Ut Nguyen is a Pediatrician who has been working as Gastroenterologist at Gastroenterology Department of the National Pediatric Hospital. She has conducted several studies on \textit{Helicobacter pylori} antibiotics resistance and virulence of gastritis and peptic ulcer among children.

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