

Evaluation of H pylori in Peruvian relatives of gastric cancer patients.

Carolina Belmar-López (Instituto Nacional de Enfermedades neoplasicas, Peru), David Custodio Zegarra (Instituto Nacional de Enfermedades neoplasicas, Peru), Miluska Castillo Garcia (Instituto Nacional de Enfermedades neoplasicas, Peru), Valeria Villegas Bernaola (Instituto Nacional de Enfermedades neoplasicas, Peru), Luis Angel Bernabe Monsalve (Instituto Nacional de Enfermedades neoplasicas, Peru), Elena Gil Merino, (Instituto Nacional de Salud, Peru) Nelly Gonzales Saenz(Instituto Nacional de Salud, Peru), Carlos Castañeda Altamirano,(Instituto Nacional de Enfermedades neoplasicas, Peru) .

BACKGROUND: Gastric cancer is highly prevalent in Peru and is related to *Helicobacter pylori* infection. H. pylori transmission is incompletely understood but is thought to mainly occur via the fecal-oral route or fecally contaminated water supplies and probably transmitted through drinking water. HYPOTHESIS: Prevalence of *H. pylori* infection in close relatives of Peruvian patients with gastric cancer is high. METHODS: A research project about prevalence of *H. pylori* among relatives of Peruvian patients with gastric cancer was accepted for a government funding (FINCyT 430-PNICP-PIAP-2014) and was approved by IEC with number: INEN 15-10. We organized coordination meetings between Gastric Cancer Surgery Unit, Private Lab performing ¹³C-urea breath test and Research Department Team to begin with making questionnaires and ¹³C-urea breath test to study the prevalence of infection in relatives of patients who came to the Institute with a diagnosis of gastric cancer since April 2015. We developed a logistic fluxogram for patients coming from surgery and endoscopy room. RESULTS: 113 gastric cancer patients and relatives of 26 of these patients were contacted and asked for taking a questionnaire. Results showed that 95; 7; and 9 persons lived more than 10; 5-10; and less than 5 years at the same household, respectively. Most cases had treated water (86), followed by water well (11) and tank (3) in their residences. Most cases drinks boiled water (87). All relatives were also invited to perform a ¹³C-urea breath test and until date, 20 tests were performed and 15 were positive for the test. Valuable information about gastric cancer and *H. pylori* relationship is reached by a fluxogram between a multi- and inter-disciplinary areas. During meeting, we will show *H. pylori* detection in gastric samples and drinking water samples with *H.pylori* specific primers; ¹³C-urea breath test; and questionnaires in relatives of patients and results.