

Causal relationship established between psychogenic and peptic ulcers: Aggregate results from before and after the Great East Japan Earthquake

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A group led by Assistant Professor Katsunori Iijima and Doctor Takeshi Kanno of Tohoku University Hospital researched the occurrence of peptic ulcer in the earthquake and tsunami affected areas with results from both before and after the Great East Japan Earthquake based on the aggregate results from seven major hospitals in Miyagi Prefecture. The results show an increase from 13% to 24% in the incidence of peptic ulcer cases from the previous year that were thought to be caused purely by stress. The cases considered for the increase were neither drug-induced nor were caused by a *Helicobacter pylori* infection, both the root causes of peptic ulcer. This established for the first time that psychological stress alone can induce peptic ulcer in humans. The research results will be published in online edition of the medical journal "Journal of Gastroenterology". The paper's title is "Peptic ulcers after the Great East Japan earthquake and tsunami: possible existence of psychosocial stress ulcers in humans".



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The proportion of *H. pylori*-negative non-NSAIDs takers among peptic ulcer patients after the Great East Japan earthquake (2011) was significantly higher than in the previous year (2010) (24% vs. 13%, $P < 0.05$).

Subjects	Year	Number	<i>H. pylori</i> infection / NSAIDs intake			
			-/-	-/+	+/-	+/+
Entire cohort	2010	152	20 (13%)	13 (9%)	98 (64%)	21 (14%)
	2011	234	55 (24%)	18 (8%)	141 (60%)	20 (8%)

NSAIDs: non-steroidal anti-inflammatory drugs

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