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Effects of PPAR γ Ligands In *Helicobacter Pylori* Associated Gastric Cancer and Its Relationship With Heterodimerized RXR α .

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Peroxisome proliferator-activated receptor (PPAR) γ was originally described as a nuclear hormone receptor that provide a direct link between fatty acid metabolism and control of gene transcription, and its transcriptional activity is thought to be maximal in the formation of a heterodimer with retinoid X receptor(RXR) α . Several studies have reported that PPAR γ is expressed in a variety of tissues including the small intestine, colon and in the several types of cancer cells, however, have not fully investigated in gastric cancer. We investigated expression pattern of PPAR γ and RXR α in two gastric cancer cell lines, and relationship between PPAR γ and RXR α . Western blotting and immunoprecipitation(IP) in gastric cancer cell lines showed that PPAR γ protein was overexpressed in *helicobacter pylori* and PPAR γ antagonist (GW-9662) treatment but RXR α was decreased. And PPAR γ agonists induced apoptosis in gastric cancer cells, but PPAR γ antagonist and *helicobacter pylori* didn't show apoptotic process in DAPI(4',6-Diamidino - 2 - phenylindole) staining. These results suggest that PPAR γ agonists maybe the target for the prevention or treatment of gastric cancer.

Keyword : PPAR γ , RXR α , gastric cancer, *helicobacter pylori*