

# **Serum progesteron level in patients with gastric adenocarcinoma before and after gastrectomy**

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摘要

## **Abstract**

BACKGROUND. Having observed that progesterone receptors exist in all gastric carcinoma tissues, the authors determined that serum progesterone levels in gastric carcinoma patients were worthy of evaluation. METHODS. Serum progesterone levels were determined in patients with gastric adenocarcinoma and in patients with benign disease who served as controls. All female patients were older than 55 years. The clinicopathologic significance of their serum progesterone levels was determined. RESULTS. In male patients (n = 122), the serum progesterone level (mean  $\pm$  standard deviation) was significantly higher than in the male control group (n = 163) ( $0.264 \pm 0.261$  vs.  $0.142 \pm 0.113$  ng/mL;  $P < 0.001$ ) and showed a tendency to be stage-related ( $P = 0.029$ ). Serum progesterone levels significantly decreased after gastrectomy in patients with disease at Stage I (n = 27), II (n = 20), and III (n = 32), but not IV (n = 7). In 11 patients who died of recurrence, the serum progesterone levels were decreased when they were disease free but raised when recurrence was clinically evident. Patients with serum progesterone levels  $>0.264$  ng/mL survived for significantly shorter periods than those with levels  $<0.264$  ng/mL ( $P = 0.039$ ). However, serum progesterone level was not an independent predictor of survival. Among the female patients (n = 12), the serum progesterone level (mean  $\pm$  standard deviation) of patients with gastric carcinoma was  $0.427 \pm 0.428$  ng/mL, whereas that of the control group (n = 17) was  $0.217 \pm 0.451$  ng/mL; the difference was statistically significant ( $P = 0.02$ ). In female disease free patients studied postoperatively, the progesterone after gastrectomy showed a tendency to decrease, but this difference was not statistically significant ( $0.444 \pm 0.368$  vs.  $0.175 \pm 0.150$  ng/mL;  $P = 0.091$ ; n = 7).

CONCLUSIONS. These data suggest that serum progesterone level reflects the presence or absence of gastric carcinoma by some unknown mechanism.