Ki-67 protein has been used as an indicator of proliferation activity in tumor cells. In gastric cancer the prognostic value has not been fully understood. This study was designed to assess the biologic significance of Ki-67 proliferation index (PI) in gastric cancer.

**OBJECTIVO/MÉTODOS:** Seventy-two patients with gastric cancer were evaluated. These patients underwent gastric resection, and the tumor tissue was stained immunohistochemically. Ki-67 PI was defined as the percentage of tumor cells positive for Ki-67. Ki-67 PI was correlated with clinicopathological characteristics and patient survival.

**RESULTADOS:** A low Ki-67 PI (less than or equal to 50%) was associated with poorly differentiated histology -diffuse type (p=0.009) and signet ring cells (p=0.004) -and younger age (p=0.022). A worse prognosis in patients with low Ki-67 PI was also found (a mean survival of 41.8 vs 63 months for high Ki-67 PI group), but not statistically significant (p=0.623, log rank test).

**DISCUSSÃO:** We found an inversely correlation between Ki-67 PI and histological differentiation grade. Patients in group with low Ki-67 PI are younger, with poorly differentiated histology and have a lower mean survival. Like other studies already suggested, we may have two different tumors phenotypes -highly invasive with low proliferative capability, and less invasive potential with higher proliferative ability. However, in this sample, no significant prognostic value was achieved between both.