Expression and clinical significance of ADAM17 protein in esophageal squamous cell carcinoma

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ABSTRACT. We examined disintegrin and metalloproteinase 17 (ADAM17) protein expression in esophageal squamous cell carcinoma and its clinical and pathological correlated factors. Western blotting and immunohistochemistry were used to detect ADAM17 protein expression in esophageal squamous cell carcinoma and the corresponding normal esophageal mucosa in 50 cases. ADAM17 protein expression in 50 cases with esophageal squamous cells was 0.887 ± 0.174; the positive expression rate was 66% (33/50). ADAM17 protein expression in 50 cases with esophageal squamous cells was 0.273 ± 0.081; the positive expression rate was 6% (3/50). Expression in esophageal squamous cell carcinoma was significantly higher than that in the normal esophageal group (P < 0.01). Esophageal squamous cell ADAM17 protein expression and the positive rate were correlated with lymph node metastasis and TNM stage (P < 0.05), but not correlated with gender, age, and histological grade (P > 0.05). ADAM17 protein was highly expressed in esophageal squamous cell carcinoma. This protein may play an important role in the incidence, invasion, and
metastasis of esophageal cancer and is valuable for the prognosis of patients with esophageal cancer.

**Key words:** Esophageal cancer; Disintegrin-metalloproteinase 17; Immunoblotting