Factors Predictive of Risk for Complications in Patients with Esophageal Foreign Bodies

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Background: Reports on predictive risk factors associated with the complications of ingested esophageal foreign bodies are rare.

Aims: The aim of this study was to determine the predictive risk factors associated with the complications of esophageal foreign bodies.

Methods: Three hundred and sixteen cases with foreign bodies in the esophagus were retrospectively investigated. The predictive risk factors for complications after foreign body ingestion were analyzed by multivariate logistic regression and included age, size and types of foreign body ingested, duration of impaction, and the level of foreign body impaction.

Results: The types of esophageal foreign body were chiefly fish bones (37.0%), foods (19.0%) and metals (18.4%). The complications associated with the foreign bodies were ulcers (21.2%), lacerations (14.9%), erosion (12.0%) and perforation (1.9%). Multivariate analysis showed that age ($p=0.005$), the duration of impaction ($p<0.001$), type ($p<0.001$) and size of the foreign bodies ($p<0.001$) were significant independent risk factors associated with development of complications in patients with esophageal foreign bodies.

Conclusion: In patients of advanced age, with a longer duration of impaction, bone-type and larger size, there was a high risk for complications.

Key Words: Foreign body, Risk factor, Complication