

# **The impact of fibrin glue in the prevention of failure after Nissen fundoplication.**

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## **Abstract:**

Background and Aims: Good long term result after Nissen fundoplication is achieved in most of the patients in specialized centres. Still failure occurs in some cases and reoperation after failed conservative treatment is done in 3-6% of the cases. Reoperation is more dangerous and results worse than after primary fundoplication. Therefore we wanted to analyze factors related to failure of Nissen fundoplication with special emphasis on utilization of crural closure, anchoring of the fundic wrap and the use of fibrin glue. Material and Methods: Patients records of 258 patients were analyzed by an independent observer. Defective fundic wrap, recurrent oesophagitis and hiatal hernia were defined as failure. Results: Failure after Nissen fundoplication was found in 29 patients (14.9%). Crural closure ( $p = 0.021$ ), anchoring of the wrap ( $p = 0.020$ ) and fibrin glue ( $p = 0.029$ ) decreased the incidence of failure. However, only crural closure ( $p = 0.010$ ) and fibrin glue ( $p = 0.019$ ) were independent factors in the prevention of failure. Conclusions: Fibrin glue as a new method might be worth utilizing to further decrease the incidence of failure after Nissen fundoplication. Because our study was retrospective, prospective randomized study should be performed before universal use of fibrin glue in the prevention of failure after fundoplication.