In children with cleft palate undergoing tympanoplasty for chronic perforation, only the presence of a syndrome or chromosomal deletion was predictive of failure.

No significant differences in age, sex, ethnicity, insurance type, cleft palate severity, operated side, number of prior tympanostomy tubes, velopharyngeal dysfunction, Pierre Robin sequence, developmental delay, craniofacial syndrome or chromosomal deletion were predictive of failure on univariate analysis. A multivariable logistic regression model demonstrated presence of a syndrome or chromosomal deletion to be predictive of surgical failure (OR 6.2 [1.2, 33.2], \( p = 0.033 \)). Time-to-tympanoplasty-failure was also significantly different between the syndromic versus non-syndromic groups (\( p = 0.029 \)).