

# Determinants of Failure After Repair of a Degenerative Mitral Valve.



Neil Cartwright, Steve Hunter, Peter Braidley, Norman Briffa,

## INTRO

- Mitral Valve Prolapse (MVP) Occurs in 3% of the adult population & is the commonest cause of mitral Valve regurgitation in the UK and US.
- No or late treatment of Mitral Regurgitation is associated with a poor late prognosis
- Durable Repair of a Prolapsing mitral valve is possible and is associated with better outcomes than with Mitral Valve Replacement.
- There are modifiable and non-modifiable causes of Repair Failure

## METHODS

- All patients who underwent mitral valve repair surgery in Sheffield over the past 15 years (cardiac surgery database) and who had at minimum of 1 echocardiogram at least 1 year after surgery.
- Patients with moderate or worse mitral regurgitation will be classed as having a failed repair.
- Pre-operative, intra-operative and post-operative variables of the patients will be entered into a multivariate regression analysis to determine independent factors associated with repair failure.

## DISCUSSION

- Early surgery to treat mitral regurgitation associated with improved prognosis.
- If early Repair advocated, it must be durable.
- Treatment of Patients with early disease & unmodifiable factors associated with failure, should be delayed
- Modifiable factors can be managed to improve repair durability and survival.

## References

- David, T. E. 2007. "Outcomes of mitral valve repair for mitral regurgitation due to degenerative disease." *Semin Thorac Cardiovasc Surg* 19 (2):116-20. doi: 10.1053/j.semtcvs.2007.04.004.
- David, T. E., S. Armstrong, B. W. McCrindle, and C. Manliot. 2013. "Late outcomes of mitral valve repair for mitral regurgitation due to degenerative disease." *Circulation* 127 (14):1485-92. doi: 10.1161/CIRCULATIONAHA.112.000699.
- Kaneyuki, D., H. Nakajima, T. Asakura, A. Yoshitake, C. Tokunaga, M. Tochii, J. Hayashi, A. Takazawa, H. Izumida, and A. Iguchi. 2019. "Recurrent mitral regurgitation after mitral valve repair for bileaflet lesions in the modern era." *J Cardiothorac Surg* 14 (1):205. doi: 10.1186/s13019-019-1035-3.

What can be modified to improve durability of a **Mitral Valve Repair** and survival of patients with **Mitral Valve Prolapse**, the commonest cause of Mitral Valve



Regurgitation in the 



Tel: 07850434619

N.Briffa@sheffield.ac.uk

