




Prosthetic heart valves

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TO THE EDITOR: In their recent Heart Valve Update, Dr. Bettadapur and colleagues¹ gave an excellent review of almost all the prosthetic heart valves. We would like to mention one type of prosthesis not listed in the review: the Harken modified ball-cage and Harken disk-cage valve.

The late Dr. Charles P. Bailey and Dr. Dwight E. Harken were pioneers in mitral valve surgery.^{2,3} They separately performed the first two cases of successful mitral valve surgery within 6 days of each other in 1948. Dr. Harken actually used a minimally invasive parasternal approach in his first success, and he coined the term “valvuloplasty.”⁴ Dr. Harken modified the design of the early ball-cage valve, then invented the low-profile Harken disk valve. He defined Ten Commandments for the prosthetic valve almost half a century ago. Number 9 stated, “It must not annoy the patient.”⁵

Cohn and colleagues⁶ reported their 12-year experience with porcine and prosthetic disk mitral valves, including 42 patients with Harken disk valves. The rate of primary valve dysfunction was remarkably low—0.4% per patient-year. There were case reports of late valve failure due to disk erosion or escape.⁷

Modern mechanical valves have long replaced the early versions used many years ago. However, it is still exciting today to learn how the visionary masters in cardiovascular surgery saved the lives of many patients. The profound impact of the early surgeries has benefited generations of patients and educated countless physicians in the 20th and 21st centuries. 

DAVID H. HSI, MD
GERALD F. RYAN, MD
Park Ridge Hospital
Rochester, New York

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