Heart valve disease

Improving patient care

The prevalence of heart valve disease is rising as life expectancy continues to increase. The management of heart valve disease is complex and several limitations in current clinic practice exist, such that better ways of organising care are needed. At Guy’s and St Thomas’ Hospitals, Consultant Cardiologists Prof John Chambers, Dr Ronak Rajani and Dr Julia Grapsa have pioneered a multidisciplinary specialist valve clinic to improve patient outcomes by delivering expert care, accurate diagnosis and timely referral for intervention.

The incidence of heart valve disease increases significantly with age. As life expectancy continues to improve, the prevalence of heart valve disease is therefore expected to rise – in the UK, the prevalence is expected to double from 1.5 million cases now to 3.3 million in 2056. This new ‘cardiac epidemic’ is set to produce a major societal and economic burden.

Currently, there is no pharmacological treatment to prevent or slow the progression of heart valve disease. The only therapy which can significantly improve both survival and symptoms is valve surgery or, if this is impossible, a transcatheter procedure. Patient outcome and management of the disease is dependent upon appropriate and timely diagnosis, referral and intervention. However, limitations exist in standard routine clinical care such that a significant proportion of patients are referred for intervention too late or not at all. There is a need for an improved care pathway for patients with heart valve disease and a growing consensus that specialist valve clinics will improve care and reduce costs. At Guy’s and St Thomas’ Hospitals, Prof John Chambers, Dr Ronak Rajani and Dr Julia Grapsa have established a specialist valve clinic with multidisciplinary involvement from cardiologists, nurses, imaging specialists and clinical scientists. Specialist valve clinics offer an integrated care pathway to improve outcomes for patients with heart valve disease.

LIMITATIONS IN CURRENT CARE

A number of limitations exist in the current management of heart valve disease. Firstly, there is a low awareness of the frequency and importance of valve disease in the population such that heart valve disease is commonly underdiagnosed. In the OXVALVE community study, moderate or severe valve disease was known in 4.9% of people aged over 65 years of age but was newly detected in a further 6.4% by population screening. Furthermore, approximately 50% of cases of severe aortic stenosis – a disease causing stiffness and narrowing of the aortic valve – are only detected at post-mortem.

Secondly, the assessment and management of heart valve disease is becoming increasingly complex, yet many patients with heart valve disease are still cared for by general physicians or cardiologists without specialist expertise. Assessment of the disease can be difficult for physicians or cardiologists who may be less skilled in making a diagnosis than a valve disease specialist, especially in determining whether a patient is truly asymptomatic.

The decision to operate for coexistent coronary artery disease is dependent upon appropriate and timely diagnosis, referral and intervention of the aortic valve – are only detected at post-mortem.

Fourth, in the UK there is significant geographical variation in access to aortic valve surgery and mitral valve repair – meaning that many patients are missing out. It is well recognised that the organisation of clinical care for patients with heart valve disease is suboptimal.

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Heart valve disease is commonly underdiagnosed. The team at Guy’s and St Thomas’ Hospitals is building specialist competencies to improve patient care.

A HOLISTIC APPROACH

The key to service delivery is to ensure that every discipline and service involved has valve expertise. All involved disciplines need to develop and maintain specialist competencies in valve disease. This improves adherence to recommended guidelines concerning investigation, follow up and intervention, leading to earlier recognition of symptoms and improved patient outcomes. The British Heart Valve Society (BHVS) has produced a consensus document on service delivery (https://www.bhvs.org.uk/bhvs-blueprint) that sets standards for the training of clinicians wanting to be educated about the nature of clinical care for patients with heart valve disease.

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Details


References

Although multidisciplinary valve clinics are seen as the ‘gold standard’ and there is an evolving evidence base that these clinics work, what more is needed for the widespread adoption of such services? It is important that networks of care are established, binding general practitioner, district hospital and cardiac centre together with the patient as the focus. This requires an IT structure guaranteeing excellent communication at every level and a general dissemination of core competencies in the care of valve disease.