the actual guidelines have still remained but we have got closer to fill some of them. There is some hope for therapy of acute and diastolic heart failure. Progress in cardiac surgery and valve interventions still await prove of their relevance for the course of heart failure. It has become clearer which patients benefit from heart failure management programmes. Competing concepts of cell therapy seem to spiral, hopefully upwards; genetics and proteomics are still a long way off heart failure management but we can further nurture our hope for evidence-based individualized diagnostics and therapy. All these advances will further add to the complexity of heart failure management, and research will require more and more interdisciplinarity.

Conflict of interest: G.E. received grants from Novartis, Boehringer, Bayer, Pfizer. F.R. received grants from Roche. Consultancy activities for Biotronik and Cardiorentis, speakers bureau Servier and St Jude Medical.

References
The list of references is available in the online version of this paper.

CARDIOVASCULAR FLASHLIGHT

doi:10.1093/eurheartj/eht337
Online publish-ahead-of-print 6 September 2013

Repairs of an aortic root to right atrium iatrogenic fistula after unsuccessful percutaneous mitral valvuloplasty

Gregorio Laguna1*, Salvatore Di Stefano1, Miriam Blanco1, Juan Manuel Durán2, Nuria Sánchez2, and Alberto San Román1

1Cardiac Surgery Department, Clinic University Hospital of Valladolid, Ramon y Cajal, Valladolid 47003, Spain and 2Cardiology department, Clinic University Hospital of Burgos

* Corresponding author. Tel: +34 983420000, Ext.86377, Email: goyotxmed@hotmail.com

We presented a case of a 37-year-old woman with atrial fibrillation, juvenile rheumatic arthritis, and severe rheumatic mitral stenosis, treated by successful percutaneous balloon mitral valvuloplasty in 2006, without cardiovascular risk factors. She presented disnea with class III of NYHA. The physical exam revealed irregular heartbeat, severe diastolic murmur, and minor peripheral oedemas.

Transthoracic echocardiogram showed severe mitral stenosis (Wilkins score: 8) and moderate rheumatic aortic regurgitation. She was programmed for a new percutaneous mitral valvuloplasty. During the interatrial septum puncture an iatrogenic fistula between right atrium and the non-coronary sinus of aortic root occurred (Panels A and B show the catheter crossing the right atrium to the aortic root, white arrows). The patient remained haemodynamically stable and asymptomatic. A transoesophageal echocardiogram revealed a high pressure flow from the aortic root to the right atrium with a gradient of 60 mmHg (Panel C, black arrow), without pericardial effusion.

The patient underwent surgery under cardiopulmonary bypass, mitral and aortic valve replacement by mechanic prosthesis, and fistulous communication closure by simple suture were undertaken (Panel D, black arrow). The post-operative course was uneventful. In conclusion, we present a case of uncommon iatrogenic fistula after unsuccessful percutaneous mitral valvuloplasty in a young patient with severe mitral stenosis. The fistula was solved under extracorporeal circulation associated with successful mitral and aortic valve replacement.