(8) Conclusions

• Right heart volume overloading in ASD patients has little influence on right atrial pump function. The right atrial pump volume increases with the volume overloading in ASD patients.

• Right atrial pump function is reduced after surgical ASD closure but preserved through the interventional procedure.

• The right atrial pump function is reduced in patients after corrective surgery of TOF. However, the right atrium has to pump more to achieve ventricular filling due to the abnormal right ventricular relaxation in this group of patients.

• In corrected TOF patients with reduced right ventricular systolic function, right atrial pump function may be relatively enhanced, although such compensation is incomplete.

• Tissue Doppler imaging is an effective method to quantify regional right atrial performance. Compared with global parameters, tissue Doppler imaging derived strain rate may supply additional and early information about cardiac function.