

## Atrial septal defects: an overview

Atrial septal defects (ASD) are the third most common type of congenital heart defects, with an estimated prevalence of 100 per 100,000 livebirths. ASDs include several distinct types of defects in the interatrial septum possibly associated with additional defects in the cardiac termination of the systemic and/or pulmonary venous return (i.e., sinus venosus ASD and coronary sinus ASD). This group of malformations allows shunting of blood between the right and the left sides of the heart.

There has been a revolution in understanding and treating ASDs in the last three decades, paving the need for this special issue of the *Journal of Thoracic Disease*, which aims to provide a comprehensive, up-to-date approach for evaluation and management of ASDs.

This issue first focuses on the basic knowledge of ASDs, dealing with anatomical considerations, genetic basis and pathophysiology. We then explore the assessment modalities and considerations for planning a case in the operating room or in the catheterization laboratory. The third part is dedicated to ASD closure, going through imaging guidance, transcatheter techniques and surgical approach. Finally, the focus is on specific issues in the management of ASDs, considering pregnancy in repaired/unrepaired ASD patients, arrhythmias and cardiac conduction disorders, pulmonary hypertension in the setting of an ASD and the role of animal models.

Authors should be commended for their expert contributions to this special issue of the journal, as they share their clinical experience and delivering an accurate and comprehensive overview of ASD evaluation and management in the current therapeutic era.

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