



# Interatrial Septum Assessment by Transthoracic Echocardiography Part 1: Secundum ASD

MULTIMEDIA

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## ABSTRACT

This 10-minute video aims at improving skills for the structural assessment of the interatrial septum using 2-dimensional transthoracic echocardiography (TTE) to increase the ability to diagnose—or rule out—the different types of interatrial communications. Of the five types of lesions, this video focuses on ostium secundum atrial septal defect. This is the first video in our MicroLearning Video Series, designed to help a target audience of sonographers, general cardiologists, general practitioners who want to gain knowledge on fundamental cardiology, and technicians. View the video at <https://vimeo.com/989145537/4898c3c590>.

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## KEYWORDS:

transthoracic echocardiogram;  
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## MICROLEARNING VIDEO SERIES

### INTERATRIAL SEPTUM ASSESSMENT PART 1: Secundum ASD



**Video 1** This 10-minute video aims at improving skills for the structural assessment of the interatrial septum using 2-dimensional transthoracic echocardiography to improve the ability to diagnose—or rule out—the different types of interatrial communications. View it at <https://vimeo.com/989145537/4898c3c590>.

## OVERVIEW

With a focus on assessing ostium secundum atrial septal defect (ASD), echocardiography educator Alicia Rangosch at Houston Methodist's Adult Congenital Heart Program reviews the preferred echocardiographic windows, views, and sweeps using a simulator to show the cardiac structures in a 3-dimensional (3D) model. Simultaneously, we show the 2D images produced in the ultrasound machine as the transducer is manipulated. We also show examples of case studies.

This list of topics indicates the time stamp for finding the following windows and views:

### LEFT PARASTERNAL LONG AXIS (PLAX) VIEW (1:16)

- Small Secundum ASD (1:57)
- Large Secundum ASD and Normal Pulmonary Pressures (2:17)
- Large Secundum ASD and Severe Pulmonary Hypertension (2:23)

### LEFT PARASTERNAL SHORT AXIS (PSAX) WINDOW

- (2:37)
- Small Secundum ASD (3:15)
- Large Secundum ASD and Normal Pulmonary Pressures (3:25)

- Large Secundum ASD and Severe Pulmonary Hypertension (3:30)

### INTERMEDIATE WINDOW (3:46)

#### APICAL 4-CHAMBER WINDOW (4:22)

- Small Secundum ASD (5:00)
- Large Secundum ASD and Normal Pulmonary Pressures (5:06)
- Large Secundum ASD and Severe Pulmonary Hypertension (5:14)

#### SUBCOSTAL WINDOW (5:22)

- Subcostal 4-chamber View with Index Marker at 3 o'clock (5:50)
- Subcostal Short Axis View with Index Marker at 1 o'clock (5:56)
- Subcostal Bicaval View with Index Marker at 11 o'clock (6:00)
- Small Secundum ASD (6:14)
- Large Secundum ASD and Normal Pulmonary Pressures (6:24)
- Large Secundum ASD and Severe Pulmonary Hypertension (6:30)
- Subcostal Short Axis at 1 o'clock (6:40)
- Small Secundum ASD (6:56)

Large Secundum ASD and Normal Pulmonary Pressures (7:06)  
Large Secundum ASD and Severe Pulmonary Hypertension (7:18)  
Subcostal Bicaval View at 11–12 o'clock (7:24)

**RIGHT PARASTERNAL WINDOW (8:10)**

Right Parasternal Border at 1 o'clock (8:56)  
Right Parasternal Border at 3 o'clock (9:00)

## COMPETING INTERESTS

The authors have no competing interests to declare.

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