

Which of the following is true of the attenuation of sound waves in tissue:

It is proportional to the amount of gel used

It is irrelevant when harmonics are utilised

Low frequencies attenuate less

Using a standard transthoracic protocol on the echo machine will negate the effect of attenuation

Seismic surveying for fossil fuels is unethical and should be banned

Which of the following regarding the relationship between frequency and wavelength is true assuming a constant speed of sound in human tissue

High frequencies have small wavelengths and thus provide better resolution on ultrasound

Low frequencies have small wavelengths and thus provide better resolution on ultrasound

High frequencies travel well over long distances

Most of the frequencies that whales use to communicate are in the 2-10 mega hertz range

Low frequencies have small wavelengths and thus result in worse resolution on ultrasound

The classic parasternal long axis view displays which of the following structures:

The left ventricular apex

The inferior vena cava

The aortic arch

The mitral valve

The right pulmonary artery

Which of the following is true regarding the surface anatomy of the parasternal long axis view?

It is inferior to the xiphoid process

It is generally right sided

It is usually in the 3rd to 5th intercostal spaces in the left parasternal region

Any probe position medial to the mid clavicular line will result in an off axis view

The probe marker should angled towards the left acromoclavicular joint

Which of the following is untrue regarding the parasternal long axis view

The left ventricular outflow tract is visualised

The mitral valve is well visualised

An assessment of left ventricular contractility can be made

No information regarding the pericardium is obtained

The left atrium is usually visualised

Which of the following is true regarding the parasternal long axis view

The entire right ventricle should be visualised

The left ventricle has no dimensions that can be measured in this view

Both the mitral and aortic valves are well visualised

Both the tricuspid and the pulmonic valves are visualised

Both the inferior and superior vena cava are well visualised

Which of the following is true regarding the pericardium on the parasternal long axis?

It is usually observed as a brightly echogenic structure below the inferolateral wall of the LV

Pericardial fluid is never discerned in this view

Constrictive pericarditis is never seen in our community

Pericardial effusion is defined as echo free space below the aorta

Pericardial tamponade usually affects the left heart before the right heart and hence is best appreciated in this view

Regarding the parasternal long axis view which of the following is true

Directing the probe beam inferiorly will obtain the RV inflow view and tricuspid valve

Directing the probe beam inferiorly will obtain the RV outflow view and pulmonic valve

Directing probe beam superiorly will obtain the RV inflow view and tricuspid valve

Directing probe beam superiorly will obtain the RV inflow view and mitral valve

Directing probe beam laterally will obtain the subclavian artery

