

LVAD: Contraindications

Relative contraindications include: multiple reoperations, congenital heart anomalies, restrictive heart disease with small ventricles, and other surgical issues (eg, previous pericardiectomy), renal failure, severe hepatic disease, severe lung disease, irreversible neurological damage, cancer and infections.

Absolute contraindications include:

1. **Extremes of weight** (extremely over or underweight)
2. **Right ventricle (RV) that is unable to support LVAD flows.** Although it is not unusual (< 10% of cases) to require temporary RV assist device (RVAD) support at the time of LVAD support, if one has a high suspicion of RV failure (based, for example, on severe dysfunction with a low right ventricular stroke work index and high right atrial pressures), the best options are biventricular assist devices, total artificial heart replacement, and transplant

Question:

The following is a contraindication for placement of a ventricular assist device:

- a. Systolic blood pressure of 80 mm Hg on dobutamine
- b. A serum creatinine of 2.8 mL/dL
- c. A platelet count of 75,000
- d. Hepatic cirrhosis on liver biopsy with normal liver enzymes and bilirubin

Answer: D – One of the more feared difficulties after circulatory support device implantation is hepatic failure. Even with normal enzymes, the finding of cirrhosis renders a patient at excessive risk