

Chest compressions

MINIMIZING INTERRUPTIONS

Interruptions to perfusion may have devastating consequences. When supporting perfusion with chest compressions, all attempts should be made to minimize interruptions. Longer interruptions, or peri-shock pauses, are strongly associated with decreased survival.

The coronary perfusion pressure is the difference between aortic pressure and right atrial pressure, and is the determinant of blood flow to the myocardium. Chest compressions generate an aortic pressure, which increases over time. The image below shows the dramatic effect interruptions have on coronary perfusion pressure. When compressions are resumed, aortic pressure must build up again to an adequate threshold.







Good communication can help coordinate a defibrillation attempt to minimize interruptions to compressions.

- Charge the machine during compressions
- Clear all non-compression personnel before compressor
- Countdown to the shock to coordinate with the compressor
- Resume compressions immediately

Defibrillation attempts are not a good time to change compressors, this will add an increased delay to resuming compressions after the shock.

Some studies have suggested it may be safe to defibrillate during chest compressions, provided there is an adequate insulating barrier between the patient's chest and the compressor's hands.