UK First Mobilisation of a patient with femoral Intra-Aortic Balloon Pump (IABP)



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Background

- Current UK practice restricts patients from mobilisation due to the position of a femoral Intra-Aortic Balloon Pump (IABP) site.
- Patients are on bed rest for the duration of the time they are on the device.
- This can be months when patients are bridging to heart transplantation.
- This can lead to:
 - muscle atrophy
 - reduced exercise tolerance
 - decreased respiratory function
 - increased post-operative recovery¹
- Due to this being new practice the protocol was required to pass through in-hospital clinical governance.

Aim

To limit physical deconditioning in patients who would otherwise be bedbound while stable on an IABP by allowing regular mobilisation.



Methods

Transfer patient from hospital bed to tilt table and strap patient into the table at thigh and abdominal level to support them.

Progress tilt table from flat to 30 degrees, 60 degrees then 90 degrees. Checking blood pressure, IABP activity and patient symptoms at each change of position and spending at least five minutes at each level.

Standing exercises on the tilt table in upright position.

Stepping off the tilt table with WZF to restrict hip flexion (no more than 30 degrees).

Gait practice within the room with WZF.

Gait practice within heart failure ward with WZF.

Gait practice out of ward when safe to do so and route risk assessed and agreed before treatment.

Chart 1: Golden Jubilee National Hospital guidelines on the mobilisation of patients on a femoral IABP

Results

- Safely mobilised a maximal distance of 2.8 miles in one day.
- Successfully transplanted, extubated within 12 hours and discharged home day 18.
- No adverse incidents.

Conclusion

- Mobilisation of patients with femoral IABP is safe and beneficial in this patient group.
- Now standard practice at the Golden Jubilee National Hospital for this cohort of patients.

References

1. Parry SM, Puthucheary ZA (2015) The impact of extended bed rest on the musculoskeletal system in the critical care environment. Extreme Physiol Med 4:16

