Intra-aortic balloon pumping and nursing care: what did we learn in the last decade?

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Now, 40 years after its introduction in the clinical practice, the intra-aortic balloon pump (IABP) is the most widely used temporary cardiac assist device.

It was used in clinical practice initially in 1967 for the treatment of cardiogenic shock.
The primary purpose of IABP is the support of the failing heart by simultaneously increasing myocardial oxygen supply and decreasing myocardial oxygen demand.
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From the experience acquired in the treatment of cardiogenic shock and in the use of the IABP, it has emerged the unavoidable need to resort as soon as possible to IABP and intensive care to avoid multi-organ damages highly associated to mortality.
In the last 10 years, complications associated with the use of IABP have significantly decreased.
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This reduction is due to the technical improvement of materials, to the wider use of percutaneous techniques and to the more and more frequent use of IABP in patients with cardiogenic shock, factors that have contributed to the improvement of the learning curve of medical and nursing professionals.
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The reduction of complications is ensured by a peculiar and scrupulous nursing practice, which critically betters itself on a constant basis.
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To optimise function in the setting of IABP inflation must be synchronised with the cardiac cycle

The preferred trigger is the electrocardiogram (ECG) tracing
Determining adequate IABP timing involves careful analysis of the pressure waveform displayed on the IABP drive console and assessment of the patient’s haemodynamic response.
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Complications Related to Intra-aortic Balloon Pump in Cardiac Surgery: A Decade Later

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**Limb ischaemia**

Diagnosis of lower limb ischaemia in an unconscious, ventilated, cardiovascularely patient can be difficult
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Limb ischaemia

Observation of the limb and serial use of Doppler have improved the outcome
CONCLUSION

The ICU nursing professional, who works with more and more sophisticated technologies and devices, has always to be acquainted with current literature, in order to ensure a better nursing care and to reduce complications.
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Thank you for your attention