

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

**G.Dilettoso<sup>1</sup>**, C.Anelli<sup>2</sup>, A.Crespi<sup>2</sup>, D.Balestri<sup>2</sup>

<sup>1</sup> Emergency Departement-“Hospital Niguarda CàGranda”-  
Milan,Italy

<sup>2</sup> Cardiothoracic ICU-“Hospital Niguarda CàGranda”-  
Milan,Italy

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

**Now, 40 years after the 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


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**The primary purpose of IABP is the support of the failing heart by simultaneously increasing myocardial oxygen supply and decreasing myocardial oxygen demand**



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

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.



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**Timing of intra-aortic balloon pump support and 1-year survival**

Ian R. Ramnarine<sup>a</sup>, Antony D. Grayson<sup>b,\*</sup>, Walid C. Dihmis<sup>a</sup>, Neeraj K. Mediratta<sup>a</sup>,  
Brian M. Fabri<sup>a</sup>, John A.C. Chalmers<sup>a</sup>

<sup>a</sup>Department of Cardiothoracic Surgery, The Cardiothoracic Centre, Liverpool, UK  
<sup>b</sup>Department of Clinical Governance, The Cardiothoracic Centre, Thomas Drive, Liverpool L14 3PE, UK

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

**In the last 10 years,  
complications associated  
with the use of IABP have  
significantly decreased.**

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

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

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## The intra-aortic balloon pump in heart failure management: Implications for nursing practice

Peter A. Lewis BN RM MN.Ed PhD<sup>a,\*</sup>,  
Darian A. Ward RN MSc<sup>b</sup>,  
Mary D. Courtney RN PhD<sup>a</sup>

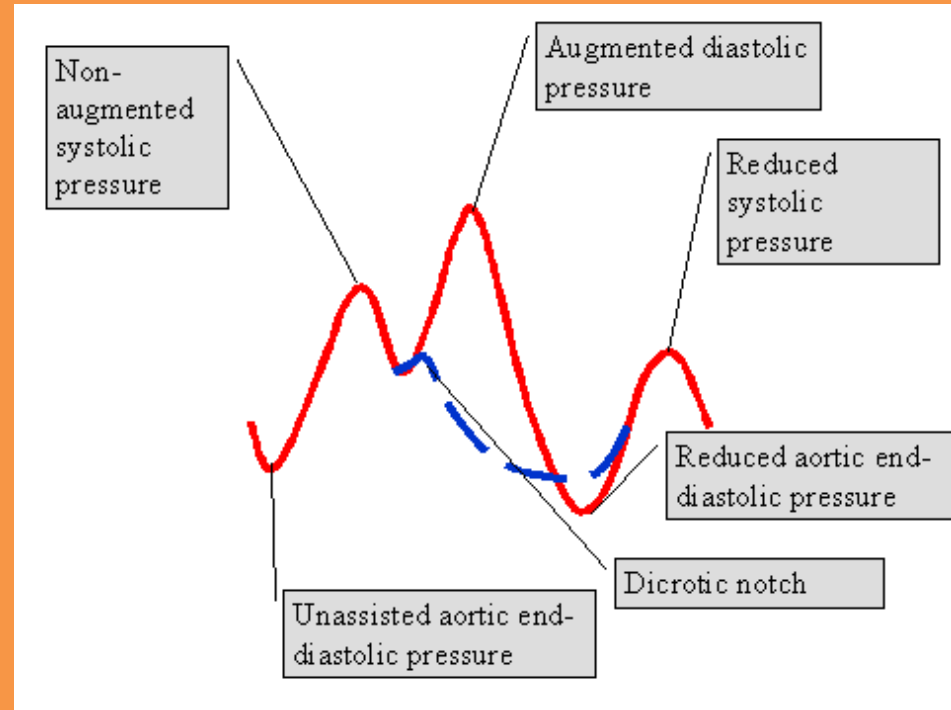
<sup>a</sup> Queensland University of Technology, Victoria Park Rd, Kelvin Grove, Brisbane, Queensland 4059, Australia

<sup>b</sup> Saint Andrews War Memorial Hospital, 457 Wickham Terrace, Brisbane 4001, Australia



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

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**

**M.M. Elahi,<sup>1\*</sup> G.K. Chetty,<sup>1</sup> R. Kirke,<sup>1</sup> T. Azeem,<sup>2</sup> R. Hartshorne<sup>1</sup> and T.J. Spyt<sup>1</sup>**

*Departments of <sup>1</sup>Cardiothoracic Surgery, and <sup>2</sup>Cardiology, Glenfield Hospital, Groby Road, Leicester LE3 9QP, UK*

**one of the main complications is the limb ischaemia but in the recent years this problem is decreasing**

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## **Limb ischaemia**

**Diagnosis of lower limb ischaemia in an unconscious, ventilated, cardiovascularly 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**