What is PERIODIST?

How Much Do You Know?

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What is clinical perfusionist?

• Clinical perfusionist is a universal job title to all person who is well qualified in perfusion technology.

• The **Perfusionist Professional** is an individual qualified by professional credentialing, academic and clinical education to provide extracorporeal patient care services.
Approx. cases performed in a year?

- PWH: 390
- QE: 450
- QMH: 620
- HKSH: 40
- Other private hospitals: 40
Our job and characteristics

- Perfusionists are knowledgeable concerning the variety of equipment available to perform extracorporeal circulation functions and is responsible, in consultation with the physician, for selecting the appropriate equipment and techniques to be used.

- In addition to the operation of the heart-lung machine, perfusionists also function in the operating of many other mechanical assist devices, such as VAD, ECMO and IABP etc.
Role of perfusionists

• Pre-operative
• Intra-operative
• Post-operative
Pre-operative

• Assessment:
  Patient: Medical History, Blood test results for
  - Underlying diseases
  - Precaution to be aware
  - Choose of: appropriate set up
    appropriate equipments
    appropriate technique
Pre-operative

- Communication

**Patient**: reduce anxiety, intra-operative management, post-operative care and education

**Cardiothoracic Surgeon**: the best approach to achieve the best surgical outcome

**Cardiac Anesthetist**: the best approach to maintain adequate perfusion
Pre-operative

• Preparation of
  1. The Heart Lung Bypass Machine
  2. The Heart Lung Bypass Circuit
  3. All the required devices are in well function
  4. Drugs – Heparin, Transamine, Cardioplegia .etc
  5. Circuit for cardioplegia delivery
  6. Other special equipments for complicated cases
Special arrangement for patient

- Haemofiltration
- Cerebral oximeter
- IABP / CPS
- Autologous fibrin glue
- Cell saver +/- leucocyte depletion filter
Role of perfusionists

- Pre-operative
- Intra-operative
- Post-operative
Intra-operative

- Operating the heart-lung machine
- Drug administration
Intra-operative

- Monitoring
- Sampling and Analyzing
Cardiopulmonary bypass
Online SaO2 / SvO2 / HCT Monitoring

A-line pressure, cardioplegia line pressure, venous return etc.

Arterial / Venous blood gas

Patient parameters: ABP / CVP etc.

Monitoring variables
And
Measurements

Urine output

Blood glucose / Lactate Monitoring

Other parameters: ECG / BIS etc.

Anti - Coagulation
The main responsibility

Make sure the patient have

Adequate Global Perfusion
Role of perfusionists

- Pre-operative
- Intra-operative
- Post-operative
Post-operative

• Look for complications that may associated with CPB (Post-operative D1 & D2)
  – Confusion
  – Urine output
  – Blood test result

• Weekly perfusion meeting for case evaluation
  – Look for progress of perfusion technique to obtain better patient outcome
Development

• Monthly perfusion meeting – for case study and information exchange and sharing
• Perfusion scientific meeting with 3 cardiac centers in HK, to share and discuss the latest practice.
• Conduct research to improve and enhance our perfusion knowledge and technique.
• Attend local and oversea seminars, workshops and courses to obtain the most advanced perfusion knowledge and technique.
What is your choice?

DOM / NC

APN / WM

RN

Perfusionist

THE END