

**Value Of Transesophageal Echocardiography
In Estimating Left Atrial Pressure In Cardiac
Surgery Intensive Care Unite**

Thesis

Submitted for partial fulfillment of
The MD In Critical Care Medicine

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَفَوْقَ كُلِّ ذِي عِلْمٍ عَلِيمٌ

صِدْقَ اللَّهِ الْعَظِيمِ

محضر

اجتماع لجنة الحكم على الرسالة الهندسة مسن
الطبيب / د. محمد عبد الوهاب محمود
توطئة للحصول على درجة الماجستير / الدكتوراة
في طب الحالات الحرجة

تحت عنوان : باللغة الانجليزية Value of trans oesophageal echocardiography in estimating left atrial pressure in cardiac surgery intensive care unit

: باللغة العربية : قيمة الموجات الصوتية لقلب عن طريق
المنظار المريعي لتقدير ضغط الأذين الأيسر في وحدة
الرعاية المركزة لمرضى القلب

بناءً على موافقة الجامعة بتاريخ ١١ / ١ / ١٩٧٧ تم تشكيل لجنة الفحص والمناقشة للرسالة
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- (٢) د. هاشم نوافل متحن داخلي
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بعد فحص الرسالة بواسطة كل عضو منفردا وكتابة تقارير منفردة لكل منهم لاعتقدت اللجنة مجتمعة في
يوم اللقاء بتاريخ ١٩ / ٨ / ١٩٧٧ بقسم مدج
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لها وكذا الأسس العلمية التي قام عليها البحث .

قررت اللجنة : قبول الرسالة شظرة دكتوراه

سنة الرابع كما أن التذكرة في قصر البراد ششم

بالإقامة والزحالة والنائب للطبيب العام

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Abstract

Background: The transesophageal echocardiography (TEE) is an excellent technique for evaluation of pulmonary venous flow (PVF) and can be used to estimate mean left atrial pressure (LAP). **Objective :** To estimate whether PVF pattern detected by TEE can be used to estimate mean LAP. **Material :** 20 critically postoperative open heart surgery were included prospectively in cardiac surgery intensive care unit with mean age of 39 ± 17.7 years, 13 were males. **Methods:** Mean LAP measured either directly or indirectly by Swan Ganz catheter. TEE was done for PVF measurements. **Results :** The results showed that in patients with LAP (≤ 15 mmHg) the systolic component of PVF was predominant while in patients with elevated LAP (> 15 mmHg), the diastolic component of PVF was predominant. The mean LAP was strongly correlated with the ratio of peak X/Y ($r = -0.79$), the ratio of velocity time integral X/Y ($r = -0.73$), and the systolic fraction of PVF ($r = -0.69$). **Conclusion:** PVF from transesophageal pulsed Doppler echocardiography can be used reliably to estimate the mean LAP in critically ill postoperative patients who underwent open heart surgery.

Key word : Transesophageal echocardiography, Pulsed Doppler, Pulmonary venous flow, Left atrial pressure, Pulmonary capillary wedge pressure.

DEDICATION

TO THE MEMORY OF MY FATHER &

TO MY MOTHER

MY WIFE &

MY SONS



Nashaat Abdel Halim
1997

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First of All,

**THANKS GOD WHO ALLOWED AND HELPED ME TO
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