

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل





A Single Center Experience in Pediatric Pacing

Thesis

*Submitted For Partial Fulfillment of Master Degree in
Cardiology*

By

Hosny Hosny Arafa
M.B.B.CH,

Under supervision of

Prof. Dr. Samir Saleh Wafa

*Professor of Cardiology
Faculty of Medicine - Ain-Shams University*

Prof. Dr. Rania Samir Ahmed

*Professor of Cardiology
Faculty of Medicine - Ain-Shams University*

Dr. Ahmed Nabil Ali

*Lecturer of Cardiology
Faculty of Medicine - Ain-Shams University*

*Faculty of Medicine
Ain Shams University*

2020

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

سورة البقرة الآية: ٣٢

Acknowledgment

*First and foremost, I feel always indebted to **ALLAH**,
the Most Kind and Most Merciful.*

*I'd like to express my respectful thanks and profound
gratitude to **Prof. Dr. Samir Saleh Wafa**, Professor of
Cardiology Faculty of Medicine - Ain-Shams University for his
keen guidance, kind supervision, valuable advice and continuous
encouragement, which made possible the completion of this work.*

*I am also delighted to express my deepest gratitude and
thanks to **Prof. Dr. Rania Samir Ahmed**, Professor of
Cardiology Faculty of Medicine - Ain-Shams University, for her
kind care, continuous supervision, valuable instructions,
constant help and great assistance throughout this work.*

*I am deeply thankful to **Dr. Ahmed Nabil Ali**,
Lecturer of Cardiology Faculty of Medicine - Ain-Shams
University, for his great help, active participation and guidance.*

Hosny Arafa

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List of Abbreviations

Abb.	Full term
ACC/AHA/HRS	American College of Cardiology, the American Heart Association, and the Heart Rhythm Society
ASD	Atrial septal defect
AV	Atrioventricular
CAVC	Common AV canal
CHB	Complete, heart block
CHB	Congenital heart block
CHD	Congenital heart disease
EMI	Electro-Magnetic Interference
HF	Heart failure
L-TGA	Levo-transposition of great arteries
LV	Left ventricular
PDA	Patent ducts arterioses
PPM	Permanent pacemaker
SHD	Structural heart disease
SVCS	Superior vena cava syndrome
VSD	Ventricle septal defect

INTRODUCTION

Permanent pacemakers have a growing use in the pediatric population due to congenital and surgically acquired rhythm disturbances, however, they present unique problems and implications. Their implantation, follow up, the diversity and complexity of pediatric patients and congenital heart disease make device management a highly individualized art in pediatric pacing. Certain challenges are posed in an adult-like somatic growth and active lifestyle susceptibility to infection and generally anticipated long survival (*Takeuchi and Tomizawa, 2012*).

Permanent pacemaker, need for lead, and generator revision, as well as lifestyle modifications, are all device-related complications that present a significant concern for patients and practitioners (*Berul et al., 2008*).

AIM OF THE WORK

The purpose of this study is:

The current study aims to present our institute's experience in pediatric and adolescent pacemaker implantation as well as long term outcomes.

Review of Literature

Cardiac Devices In Children

Introduction:

Since children are paced for a lifetime, they are prone to a higher incidence of long-term adverse events and are at high risk of experiencing the adverse consequences of cardiac stimulation at a non-optimal site (*Cohen et al., 2001*).

Because of small body size, the presence of a congenital defect with a right-to-left shunt, or postoperative absence of transvenous access to the target chamber, children often need to be permanently paced epicardially (*Berul et al., 2003; Khairy et al., 2006*).

Children's higher activity levels lead to greater stress on device hardware and their growth expectancy leads to a higher incidence of lead dislodgement or fracture in the follow-up. Concerns have been voiced regarding the long-term performance of endocardial leads in children, given the high incidence of abandonment, potential valvular injury and vascular crowding (*Bar-Cohen et al., 2006; Figa et al., 1997; Klug et al., 2003*).

Endocardial leads are relatively contraindicated in patients with right-to-left shunt because of the risk of systemic thromboembolism (*Khairy et al., 2006*).