شبكة المعلومات الجامعية

بسم اللّه الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم باللّه العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

بعض الوثائق الأصلية تالفة

شبكة المعلومات الجامعية

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

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List of Contents

List of Tables

List of Figures

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-transpostion 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)***.