

實用產科學

(中英對照)

譯者

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PRACTICAL OBSTETRICS

實用產科學

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PRACTICAL OBSTETRICS

A short textbook
in English and Chinese

FOR STUDENTS AND MIDWIVES

Daphne W. C. Chun and K. H. Lee



HONG KONG UNIVERSITY PRESS

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PREFACE TO THE FIRST EDITION

The need for an up-to-date textbook on obstetrics for local use has long been felt. In Hong Kong, more than 100 medical students and 300 midwives are trained annually. There are at present well over 1,000 registered doctors and 3,000 midwives. Approximately two-thirds of the midwives and a few graduates from China who do not have a working knowledge of English, have been trained through the medium of the Chinese language but a suitable Chinese textbook is difficult to find. The remainder who have received their education in English have used textbooks written in that language which though good for basic training, do not meet our particular local conditions.

Therefore, in response to repeated requests, the staff of the Department of Obstetrics and Gynaecology of the University of Hong Kong have undertaken to write a suitable reference book on practical obstetrics. This book is written in simple English and illustrated with diagrams and tables. The Chinese translation has been prepared by Dr. H. P. Lau with the assistance of Dr. K. H. Lee and Dr. S. Y. Cheng.

It may not be inappropriate to include a brief history of the Tsan Yuk Maternity Hospital here as constant reference is made by the authors to its statistics. The Hospital first came into existence in 1922 with only 30 beds. The years that followed saw a steady increase in this number until a maximum of 85 was reached in 1950. The number of patients also increased from a few hundred to several thousand annually. By 1951, more than 7,000 were admitted. In 1955, the hospital was rebuilt to accommodate 200 beds. However, this still proved quite inadequate to meet the demand for admissions and in 1957, an unprecedented figure of 11,000 was recorded. To cope with this problem, admission was restricted to high-risk patients only and in consequence the annual number was reduced to about 6,000. Preference is given to patients with medical or obstetrical complications, grand multiparae and primigravidae.

The Tsan Yuk Hospital is at present the only centre in the Colony which provides facilities for training medical students of the University of Hong Kong in the obstetrics course.

Many people have assisted in the writing of this book but Dr. K. H. Lee has contributed most of its chapters. He has also read the proofs.

We are greatly indebted to Professor C. Elaine Field for her valuable suggestions in the section on the newborn baby. We also wish to thank Mr. Thomas Chan and Miss Patsy Choy who typed the manuscript and prepared the illustrations.

Criticisms and suggestions for incorporation in later editions will be gratefully welcomed by the editors.

DAPHNE W. C. CHUN

初版前言

我們久已感覺香港需要出版一本適合本地用之現代產科書。在香港每年超過一百名醫科學生及三百名接產士接受訓練。現在註冊醫師人數超過一千名，註冊接產士人數超過三千名。約三份二之接產士及少數中國內地醫科畢業生對實用英語認識不足，受訓時用中文講授，但一本適當之中文教科書甚難尋求。餘者曾受英語教育可用英文教科書，此等書籍雖可供給基本學識，但不能適應本地之特別情況。

為響應各界屢次要求，香港大學產婦科醫師乃着手著作一本適用之實用產科參考書。現在該書已用簡單英語寫成，附有圖表加以說明。並在李健鴻醫師及鄭兆如醫師協助下，由劉鴻翹醫師負責譯成中文。

因書內常提及贊育醫院之統計數字，所以應在此簡述該院之歷史。贊育醫院在1922年落成，當時病牀祇有三十張，隨後牀數逐漸增加，至1950年，有病牀八十五張。產婦數目亦劇增，由每年數百增至每年數千。在1951年，超過七千名產婦入院分娩。1955年贊育醫院重建，可容納二百病牀，但仍不足應付產婦之需求，而在1957年，多至一萬一千名產婦入院。為解決此困難，醫院限制祇收危險性高之產婦，由此產婦數目減至每年六千。凡產婦患有內科或產科併發症者，妊娠次數過多者及初胎產婦，可獲優先收容。

贊育醫院乃現在香港唯一可供香港大學醫學生作產科訓練之地方。

此書由多人合寫而成，但李健鴻醫師負責撰寫其中之大部份，並擔任編訂及校對工作。

我們感謝菲爾特教授對新生兒一節提供寶貴意見，並感謝陳庭育先生與蔡雪君女士為我們打英文稿及繪畫說明圖表。

編者對各方面之批評及再版時之建議將表感激及歡迎。

秦惠珍

PREFACE TO THE SECOND EDITION

The first edition, the first medical textbook published in both English and Chinese, was well received by obstetricians, medical students, staff, and student midwives alike. In this second edition we have taken account of various advances in the field of obstetrics.

Two new chapters have been added. One is on ultrasonic technique, which is frequently employed for diagnostic purposes. The other is on family planning and is included to give medical students and midwives a good knowledge of birth control.

Revisions have been made in most of the chapters to bring them up-to-date. The entire work of revising has been undertaken by both of us. The Chinese translation has been prepared by Dr. H. P. Lau in conjunction with Dr. K. H. Lee. The chapter "Detection of Foetal Hypoxia" has been completely rewritten to include current methods for the assessment of foetal well-being and foetal monitoring during labour. The text truly reflects the efficiency and the high standard of equipment in the Tsan Yuk Hospital labour ward.

DAPHNE W. C. CHUN
K. H. LEE

HONG KONG

May, 1973

再版前言

本書初版乃醫科教科書中第一本有中英對照者，發行以來，甚受產科醫生，醫科學生，助產士及受訓助產士之一致歡迎。所以此次再版仍保持中英對照之特色。

新加之兩章，其中一章敘述超音波技術。超音波現已常在產科診斷上採用。另一章敘述家庭計劃，使醫科學生及助產士獲取充份關於避孕之知識。

此外，每章皆經修訂以趕上時代。修訂再版之工作全部由我等二人負責。中文翻譯則由劉鴻翹醫生及李健鴻醫生擔任。“胎兒缺氧之診斷”一章，則全部重寫，並包括診斷胎兒情況及分娩期胎兒嚴密觀察之最新方法。書中所述足以顯示贊育醫院產房之設備完善及工作效率良好。

秦 惠 珍
李 健 鴻

香港
一九七三年五月

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CHAPTER 1

ANATOMY OF THE BONY PELVIS

The bony pelvis is made up of four bones: two innominate bones at the sides and in front, the sacrum and coccyx behind (1/ Fig. 1).

Each innominate bone is composed of three bones completely fused together, the ilium, the ischium and the pubic bone. The ilium forms nearly all the bony portion of the false pelvis and joins the sacrum to form the sacro-iliac joint. The ischium is fused at its upper end with the ilium and pubis to form slightly more than two-fifths of the acetabulum. In the upright position, the body rests on the lower end of the ischium. The ischial tuberosity is the rough lower end on the dorsal surface. The two pubic bones meet in front to form the symphysis pubis.

The sacrum is made up of five fused vertebrae. It is roughly triangular in shape with its base pointing upward and joining the last lumbar vertebra to form the lumbo-sacral joint. Its upper anterior portion projects inwards to form the sacral promontory. Its lower and narrow end is joined to the coccyx forming the sacro-coccygeal joint. On either side it joins the ilium to form the right and left sacro-iliac joints.

The coccyx is made up of five small pieces of cartilaginous bones fused together. It can be disregarded in labour as a part of the bony pelvis because the sacro-coccygeal joint is flexible and can be pushed backwards by the advancing foetal head during labour. In extremely rare cases, the sacro-coccygeal joint may be ankylosed resulting from a fracture or disease which may give rise to contraction of the outlet of the pelvis.

The entire pelvis is made up of two parts:—

1. **The false pelvis** is the portion which lies above the ilio-pectineal line. This part of the pelvis plays no part in parturition.

2. **The true pelvis** is the portion which lies below the false pelvis and is concerned with parturition. Hence its shape, size and general structure are important in obstetrics. The true pelvis is divisible into three parts (1/ Fig. 2):—

i) **The brim** or inlet is the ilio-pectineal line which divides the pelvis into false and true pelves. It is oval-shaped and bounded behind by the sacral promontory and the ala of the sacrum, on either side by the sacro-iliac joint, the ilio-pectineal line with its ilio-pectineal eminence (the slightly raised portion of fusion of the ilium with the pubic bone) and the upper border of the superior ramus of the pubic bone, and in front by the superior border of the symphysis pubis.

ii) **The mid-cavity** is the curved canal lying between the inlet and outlet. It is bounded behind by the sacrum, on either side by the sacro-spinous and sacro-tuberous ligaments (which run respectively from the sacrum to the ischial spine and ischial tuberosity), the ischium and in front by the posterior surface of the symphysis pubis. This part of the pelvis is somewhat circular in shape and looks like a cylinder, curving downwards and backwards at first and then downwards and forwards with a long posterior wall formed by the whole length of the sacrum of about 10 cm. and a short anterior wall formed by the symphysis pubis of about 4.5 cm.

骨盆之解剖

骨盆乃由四塊骨骼構成：前面與兩旁為二髖骨，後為骶骨與尾骨（圖一）。

每一髖骨係由三塊骨骼聯合組成，即髌骨，坐骨與恥骨。左右二恥骨在前連合成為恥骨聯合。骶骨之側與兩旁之髌骨相連，其結合處為骶髌關節。骶骨之上面與腰椎骨之末塊相連成一角度，使骶骨之上端突入成為骶骨岬。其下面與尾骨相連，其結合處為骶尾關節。尾骨乃由五塊小軟骨構成。由於骶尾關節為一可能移動的關節，分娩時下降之兒頭能迫使尾骨向後。故以分娩而言，尾骨可以不列為骨盆之一部份。但間或有極少數之婦人由於折骨或患病以致骶尾關節硬化，則骨盆出口可能狹窄而引致對分娩有不利之影響。

骨盤可分為二部

1. 假骨盆：位於髌恥綫之上。該綫乃由骶骨岬之尖，至恥骨聯合上緣之中點。此部份之骨盆與分娩無關。
2. 真骨盆：位於假骨盆之下，對於分娩有極大關係。因此其形狀、大小、與構造對於產科學極為重要。

真盤骨可再分為三部（圖二）

1. 骨盆上口或入口：即是真骨盆與假骨盆之分界綫。此入口呈橢圓形，後面以骶骨岬與髌骨翼為界。兩旁順次為骶髌關節，髌恥綫與其髌恥隆凸，（此髌恥隆凸乃髌骨與恥骨相連接處輕微突出之部份），及恥骨上枝之上緣。前面則以恥骨聯合之上緣為界。

2. 骨盆腔：此是一彎曲管道，位於骨盆入口與出口之間。後面以骶骨為界；兩旁為骶棘韌帶，骶結節韌帶（此二韌帶是由骶骨，至坐骨棘，與坐骨結節），及坐骨；前以恥骨聯合之後面為界。骨盆腔之形狀乃一圓管，起始時彎向下及向後，然後向下及向前，形成一長後壁及一短前壁。後壁乃由骶骨構成，長約 10 厘米。前壁則由恥骨聯合構成，長約 4.5 厘米。

iii) **The outlet** is divisible into anatomical and obstetric outlet. The anatomical outlet is diamond-shaped. It is bounded behind by the tip of the coccyx, on either side by the ischial spine, the inner surface of the ischial tuberosity and in front by the inferior pubic ramus and the lower border of the symphysis pubis. The boundaries of the obstetric outlet are the same except for the posterior part which is the lower border of sacrum. The coccyx can be swung backwards during labour hence obstetric outlet is the one used in parturition.

Types of Female Pelvis

The pelvis may be classified into four different parent types according to the shape of the brim (1/ Fig. 3):—

- i) **Gynaecoid**—in which the brim is more or less round. This is the normal female pelvis and is most suitable for childbirth.
- ii) **Anthropoid**—in which the antero-posterior diameter of the brim is greater than the transverse diameter and resembles the pelvis of the anthropoid ape.
- iii) **Platypelloid**—in which the transverse diameter is wider than the antero-posterior by at least 3 cm.
- iv) **Android**—in which the brim is wedge-shaped and the pelvis morphologically resembles that of the male. This type of pelvis is most unsuitable for childbirth.

All these parent types can be large, average or small as regards their size. Besides, mixed forms combining features of more than one parent type are not uncommon.

The following table shows the relative frequency of each type in a series of 1,005 Chinese female pelves examined by the Departments of Radiology and Obstetrics at the Tsan Yuk Hospital:—

Table I—Chinese Female Pelves

<u>Type of Pelvis</u>			<u>Total</u>	<u>Percentage</u>
Gynaecoid	Pure	732	808	80.4
	Mixed	76		
Anthropoid	Pure	108	137	13.6
	Mixed	29		
Platypelloid	Pure	31	54	5.6
	Mixed	23		
Android	Pure	2	6	0.6
	Mixed	4		
			<u>1,005</u>	<u>100.00</u>