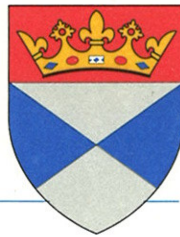
University Of Dundee
MEDICINE



Dear Dr Al-Fallouji,

I am delighted to be able to send you 6 copies of the Journal with your article. I hope you like the final version.

I am very pleased you corrected this statement. I believe that many of the early writings of Arabic physicians were overlooked as so few Westerners could read the script - Indeed I have only recently become aware of the writings of Ibn-an-Nafis (13th Century) who described the pulmonary circulation 300 years before Michael Servetus and Realdo Colombo.

Thank you for sending in the paper.

Yours aye
Charles Forbes.

PS. I was thinking of you last week as I transited through Dubai, Bahrein and later Abu Dhabi en passage to & from Bombay.

Head of Department, Professor Charles D Forbes

Ninewells Hospital and Medical School, Dundee, DD1 9SY, Scotland Telephone (0382) 60111 Ext 2199 Fax (0382) 60675

Volume 38 Number 1 February 1993

Scottish Medical Journal

Comment

3 Scotland's health: The road to the ills?
S. Farrar, G.H. Mooney.

5 Providing for women following miscarriage.
M.A. MacLean, G.P. Cumming.

7 Tropical medicine: A changing scenario.
G.C. Cook.

Original Articles

12 Trends in Scottish cigarette smoking by gender, age and occupational status, 1984-1991.
D.G. Uitenbroek, D.V. McQueen.

16 Prevalence of maternal HIV infection in Scotland based on unlinked anonymous testing of newborn babies. Update.
D.M. Tappin, R.W.A. Girdwood, E.A.C. Follett, R. Kennedy, A.J. Brown, F. Cockburn.

18 Epidemiology of Haemophilus Type B invasive disease in childhood in Glasgow.
A. Coggins, C.W. Shepherd, F. Cockburn.

20 Experience of a laboratory service for drug screening in urine.
D. Simpson, J. Greenwood, D.R. Jarvie, F.M.L. Moore.

Case Reports

27 Riedel's thyroiditis complicated by hypoparathyroidism and hypothyroidism.
E.R. McRorie, J. Chalmers, I.W. Campbell.

28 Coronary artery ectasia: Is it associated with myocardial ischaemia and infarction?
S.J. Cross, H.S. Lee, A.C.F. Kenmure, K.P. Jennings.

History

30 Arabic caesarian section: Islamic history and current practice.
M. Al Fallouji

Reports of Societies

31 Caledonian Society of Gastroenterology.

Sponsored as a service to medicine in Scotland by

Boehringer Mannheim UK Pharmaceuticals Ltd.
Livingston West Lothian

Journal of the Royal Medico-Chirurgical Society of Glasgow and the Scottish Society for Experimental Medicine.
Affiliated Society : The Aberdeen Medico-Chirurgical Society

0036-9330/93/02192/030 $2.00 in USA
© 1993 Scottish Medical Journal

ARABIC CAESARIAN SECTION ISLAMIC HISTORY AND CURRENT PRACTICE

M. Al Fallouji
University Department of Surgery Faculty of Medicine and Health Sciences U.A.E. University, Al-Ain, PO Box 17666, United Arab Emirates

Caesarian section is one of the many oriental surgical innovations which was latterly adopted by Muslim surgeons, yet, surprisingly, it escaped the notice of many excellent European historians. May I reiterate Montgomery Watt:

"for our cultural indebtedness to Islam, however, we Europeans have a blind spot. For the sake of good relations with Arabs and Muslims we must acknowledge our indebtedness to the full".[1]

The statement by Young (1944) that;

"Mohammedanism absolutely forbids caesarian section and directs that any child so born must be slain forthwith, as it is the offspring of the devil"[2]

is not an accurate representation of the situation for there is no reference in support; it may also mislead other researchers.[3]

In Islam, it is incorrect because killing is forbidden; the Qur'an (the backbone of Islamic law) states:

"And whoso saveth the life of one, it shall be as if he had saved the life of all mankind" (V-The Table, verse 32).[4]

In fact, the Qur'an tells surgeons of three coverings of the fetus, ie, anterior abdominal wall, uterine wall and amniotic sac, thus facilitating their operative techniques:

"He created you in the wombs of your mothers, creation after creation, in a three-fold gloom" (XXXIX-The Troops, verse 6).[4]

According to the manuscript of *Shah-nama* or *"Book of Kings"* written and illustrated by Ferdowsi circa 1560-1580 (possessed by the Metropolitan Museum of Art in New York), the earliest caesarian section was performed on Rustam, the Persian hero (many centuries before that performed to deliver Caesar). Such an immaculate birth was taken as a sign of a high destiny — Kings and heroes tend to avoid the dark, dirty confines of the natural channels of birth *(inter faeces et urinas nascimur).*

It is evident that caesarian section was initially performed (for lack of technical knowledge) only on the dead, particularly if there was still hope of rescuing the full-term child, and if it was also a question of delivering a possible heir to the throne the ancient Persians seem to have allowed exceptions. Ferdowsi must have personally seen a caesarian section being performed before illustrating it in his book.

Edinburgh University Library has the original manuscript (161, folio 6) entitled *"Al-Athar al-baqiya an al-qurun al-khaliyah"* (The Chronology of Ancient Nations) by Al-Biruni dated 1307/08; it reveals that caesarian section in Islam has not only continued to be performed under special circumstances on dead mothers, but has probably been performed on living wives of Muslim Kings, Sultans, and Amirs to rescue both the mother and the heir.

Plates illustrating Muslim surgeons performing caesarian section were gathered from Ferdowsi's *Shah-nama* and Al-Biruni's book by Brandenburg with an excellent commentary. Plates No 65, 73, 81, and 82 clearly illustrate this.[5]

Furthermore, Arab surgeons, particularly, Albucasis (936-1013) and Rhazes (865-925) were aware of rescuing living mothers threatened by spread of sepsis from their dead fetus; they not only described the details of vaginal extraction of a dead fetus, but devised and manufactured various instruments for such an operation ie Albucasis' obstetric forceps.[6,7,8]

Arab surgeons, thus were well aware in their management of three predicaments, namely, the dead mother with a living fetus, the living mother with a living fetus, and the living mother with a dead fetus. Arabs therefore claim to be the founders of Midwifery as a separate branch of the medical profession.[9]

For moral or doctrinal reasons, Islam upheld the principle that still holds for every obstetrician today: *First save the mother, even if the child has to be sacrificed; only once hope has been abandoned for the mother should an attempt be made to save the child (if still alive).*

Currently, caesarian section is performed regularly in all Arabic and Islamic countries according to standard obstetric indications whether absolute (cephalo-pelvic disproportion, and placenta previa) or relative (mal presentations, mal-positions, maternal and/or fetal distress).

The safety of general anaesthesia and advances in medical skills have made the abdominal delivery an extremely safe procedure. Gone are the days when caesarian section is performed on dead mothers!

(Written in reply to Hillan EM, Caesarian Section: Historical Background. Scottish Medical,1991; 36: 150-154.)

REFERENCES

1 Watt WM. The Influence of Islam on Medieval Europe. Islamic Survery No 9. Edinburgh at the University Press. Reprinted paperback edition, 1987.
2 Young JH. Caesarian Section: the history and development of the operation from earliest times. London: HKLewis & Co Ltd. 1944.
3 Hillan EM. Caesarian Section: Historical Background. Scot Med J 1991; 36: 150-154.
4 The Glorious Qu'ran, Text & Explanatory Translation by Marmaduke Pickthall. Karachi: Taj Company Ltd (no date)
5 Brandenburg D. Islamic Miniature Painting in Medical Manuscripts. Basle, Switzerland: F Hoffman-La Roche & Company, 1982.
6 Albucasis: On Surgery and Instruments. A definitive edition of the Arabic text with English translation and commentary by MS Spink and GL Lewis. London: The Wellcome Institute of The History of Medicine, 1973: 476-500.
7 Rhazes' Liber Continens (Kitabul Hawi Fi't-Tibb) in 23 volumes. Volume IX. On The Diseases of The Uterus, Gynaecology and Midwifery. Edited by The Bureau based on the unique Escurial Ms. (Nos 810 &813), Madrid. Hyderabad-India: Dairatul Ma'arifil Osmania, 1961. pp 127-163 (in Arabic).
8 Ullmann M. Islamic Medicine. Islamic Survery No 11. Edinburgh. The University Press 1978: 34-35.
9 Mirza MR, Siddiqi MI. Muslim Contribution to Science. Lahore: Kazi Publications 1986: 197.

REPORTS OF SOCIETIES

CALEDONIAN SOCIETY OF GASTROENTEROLOGY

The 62nd meeting of the Society was held at Ayr Hospital on 29th May 1992.

The following papers were presented.

A STUDY OF CHRONIC DUODENAL ULCER DISEASE IN PATIENTS WITHOUT H PYLORI INFECTION. K McColl, AM EL Nujumi, RS Chittajallu, E EL Omar, CA Dorrian, S Dahill, R Bessent, H Gray.

MEASUREMENT OF DUODENAL MUUCOSAL PROTEIN SYNTHESIS AFTER DELIVERY OF 13(C) LEUCINE AND 13(C) VALINE BY TV AND IG ROUTES. IM Nakshabendi, W Obiedat, RI Russell, S Downie, MJ Rennie.

ABNORMALITIES OF FASTING MOTILITY IN THE IRRITABLE BOWEL SYNDROME. MA Louden, PK Small, D Smith, B Waldron, FC Campbell.

PROLIFERATING CELL NUCLEAR ANTIGEN IMMUNOLOCALISATION (PCNA) IN UNCOMPLICATED ANTRAL GASTRITIS: ASSOCIATIONS WITH MUCOSAL MORPHOLOGY AND FUNCTION. PK Small, B Waldron, MA Loudon, D Hopwood, DP Lane, FC Campbell.

CHEMOTHERAPY IN UNRESECTABLE PANCREATIC CARCINOMA: A CLINICAL TRIAL. KR Palmer, M Kerr, R Leonard, DC Carter.

SIMVASTATIN 40mg. PLUS URSODEOXYCHOLIC ACID 750mg. DAILY FOR DISSOLUTION OF RADIOLUCENT GALLBLADDER STONES. MC Bateson.

WHY DOES ENDOSCOPIC TREATMENT FOR BLEEDING PEPTIC ULCER SOMETIMES FAIL. CP Chadhary, C Rajgopal, KR Palmer.

LONG TERM FOLLOW UP OF PERCUTANEOUS ENDOSCOPIC GASTROSTOMY (PEG) TUBE-FED PATIENTS. R Park, E Spence, J Lang, M Allison, J Morris, B Danesh, R Russell, P Mills.

PHYSIOLOGICAL SHEDDING OF OESOPHAGEAL SQUAMES IN THE ROLE OF CELL ADHESION MOLECULES AND DESMOSOMES. J Hopwood, J Jankowski, KG Wormsley.

PALLIATON OF JAUNDICE AND IVC OBSTRUCTION COMPLICATING PANCREATIC CARCINOMA BY A DOUBLE STENTING TECHNIQUE (CASE REPORT). C Wilson, AW Reid, I Stewart, I Watt, WR Murray.

ADENOMA OF THE AMPULLA OF VATER IS A PRECANCEROUS LESION. DS Sanders, G Bird, GD Smith, B Danesh.