

CURRICULUM VITAE

JATIN B DESAI

Name

Jatin Bhagwanprasad DESAI

Civil Status

Married with two children

Nationality

British

Medical School

University of Glasgow
1970-75

Qualifications

MB,ChB. 1975

FRCS Glasgow 1979

FRCS Edin C/Th 1986

GMC Registration

Full No. 1348240

Defence Organisation

Medical & Dental Defence Union of
Scotland
D-8-220

Certificates of Merit

Physiology

Clinical Surgery

Clinical Medicine

Orthopaedics

Present Appointment
4th June, 1990

Consultant Cardiothoracic Surgeon

King's College Hospital
Denmark Hill, London SE15 9PS.

Previous Appointments

1/8/75 - 31/1/76

House Officer - Dr. Rogan Stobhill Hospital

General Medicine with Cardiology and Endocrinology
I gained experience in the management of CCU,
Transvenous Pacing and Cardiac Catheterisation
under supervision.

1/2/76 - 31/7/76

House Officer - Mr. D.B. Brown Western Infirmary
and Gartnavel Hospital Glasgow.

General and Vascular Surgery, acute and cold.
Accident and Emergency.

1/8/76 - 31/7/77

Senior House Officer - Orthopaedic Surgery
Glasgow Royal Infirmary

Acute and Chronic Problems including A and E.
I carried out several operations on fractured hips and
ankles.

I Passed the Primary FRCS and was successful in gaining a place on the West of Scotland
Surgical Training Programme.

1/8/77 - 31/7/78

Registrar - Mr. T. Menzies Glasgow Royal Infirmary.

I was taught a wide range of surgical procedures
including Appendicectomies, cholecystectomies,
Hernias and Bowel resections. I helped with several
oesophagectomies and gained experience in their
management.

1/8/78 - 31/7/79

Registrar - Mr. D. Harper Falkirk Royal Infirmary

General Surgery, Vascular and Urology.
Aortic and Carotid Surgery.

1/8/79 - 31/10/79

Registrar - Prof. Gibson Canniesburn Hospital Glasgow

Plastic Surgery.
A variety of routine and complex procedures were
experienced. 4 Weeks were spent managing patients
in the regional Burns Unit at the Glasgow Royal Inf.

Cardio-Thoracic Appointments

1/11/79-31/6/82

Registrar to Professor D J Wheatley
Professor W Bain
Mr M A Turner
Mr K Davidson
Mr J Pollock

Glasgow Royal Infirmary, Western Infirmary,
Mechnikov and Hospital for Sick children.

1/7/82 - 31/6/84

Registrar to Professor K M Taylor
Professor H H Bentall
Mr R N Sapsford
Mr R deL. Stanbridge

Hammersmith Hospital
Royal Postgraduate Medical School, London.

15/7/84 - 31/10/84

1/11/84 - 30/11/86

Locum Senior Reg Mr R N Sapsford
First Assistant Mr R deL. Stanbridge
Professor A Nicolides
Miss A Mansfield

St Mary's Hospital, London W2

I was appointed Senior Registrar in Cardiothoracic Surgery in November 1986 at Hammersmith, Harefield and Middlesex Hospitals.

1/12/86 - 28/2/88

Senior Reg. Mr E Townsend
Mr S W Fountain
Mr A Rees
Professor M Yacoub

Harefield Hospital, Middlesex.

1/3/88 - 28/2/89

Senior Reg Mr M F Sturridge
Mr D N Ross
Mr T Treasure
Mr P Goldstraw

Middlesex Hospital, London W1.

1/3/89 - 28/2/90

Senior Reg Professor K M Taylor
Mr R N Sapsford
Mr R deL. Stanbridge
Mr P L C Smith
Mr M Elliot

Hammersmith Hospital,
Royal Postgraduate Medical School, London W10.

I have been a consultant cardiothoracic surgeon at King's college hospital since June 1990.

My main activity is coronary artery bypass surgery and heart valve replacement. We have been increasingly using arterial conduits in myocardial revascularisation as these offer better long term patency, better long term survival and event free survival. As many as 80% of patients get bilateral internal thoracic(mammary) artery grafting. King's College Hospital Cardiac Surgery Department is now well known throughout the UK as a leader in the use of arterial conduits. I performed the first gastro-epiploic arterial graft at King's college hospital in 1990 and we now have the biggest series in the UK and one of the largest in the world.

I have a good experience of mitral valve repair and my policy is to conserve the native valve as often as possible.

I have undertaken combined coronary bypass grafts and abdominal aortic aneurysms repairs with success. This procedure, done on cardiopulmonary bypass, results in rapid recovery and obviates the need of a second major procedure.

King's College Hospital has become one of the five designated centres in the trial of Extra Corporeal Membrane Oxygenation (ECMO) in Neonates. I am responsible for the cannulation for this bypass in babies.

I also provide a Thoracic Surgical Service.

More recently, I have embarked on a program of minimally invasive coronary bypass surgery. This is suitable only for a small minority of patients with single vessel disease.

CLINICAL EXPERIENCE as Junior Doctor**Adult Cardiac**

I have gained extensive experience in all aspects of adult cardiac surgery since 1979. After my introduction to coronary artery bypass surgery in Glasgow I was allowed to perform increasing numbers of these operations with and without supervision.

I am now comfortable with all grades of complex cases including reoperations. I am also well experienced with all forms of valve repair and replacement. I have carried out ascending aortic replacement for dissection and repair of post-infarction VSD.

Paediatric

A total of 8 months were spent at the Royal Hospital For Sick Children where a 100 open heart cases approx. were performed every year. I learnt about a wide variety of complex congenital defects and their management. I was allowed to carry out closures of ASD's and open pulmonary valvotomies. My paediatric exposure continued at the Hammersmith Hospital and later at Harefield Hospital where I assisted Prof. Yacoub with several "switch" operations for Transposition of the great arteries.

Thoracic Surgery

Pulmonary and Oesophageal Surgery have been thoroughly covered in my training. One year was spent at Harefield Hosp doing Thoracic surgery and this consolidated my knowledge and skills in the investigation and treatment of a wide spectrum of disease. Further training was obtained at the Middlesex hospital under the guidance of Mr Goldstraw.

Transplantation

During my year at Harefield I took the opportunity to gain experience in Human Heart and Heart-Lung Transplantation with Professor Yacoub. I have assisted with over 25 transplants and have also personally harvested organs. I have observed Lung transplantation with Dr J Cooper at Barnes Hospital, St Louis, USA for a period of ten weeks. I had the opportunity to observe laboratory procedures and experiments, decision making case conferences and operative theatre work.

Experimental Work

- 1 I have participated in studies of cerebral damage in Dogs during Cardiopulmonary Bypass. CSF sampling for biochemical markers of brain injury was combined with histological assessment of cerebral damage. Studies with Methylprednisolone pretreatment were completed. (Glasgow)
- 2 I have completed an extensive investigation of the effect of Cardiopulmonary Bypass on Hepatic Blood Flow and Metabolism. This work has been carried out with Dr R Mathie, under the guidance of Professor K M Taylor. Different forms of bypass, pump flows and hypothermia have been investigated. This work is presently being prepared as my Thesis. (Hammondsmith)
- 3 I have carried out a study in Dogs comparing the effects of Hollow Fibre, Membrane and Bubble Oxygenators on (a) Neutrophil sequestration in the lungs (b) Damage to the alveolar membrane as assessed by Permeability change and (c) Cerebral damage as measured by CSF CK isoenzyme.
- 4 I have been involved in a study in Dogs which was designed to determine the effects of a specific Thromboxane A₂ receptor antagonist on the vascular and haemodynamic responses to CPB. The investigation will test the hypothesis that TxA receptor antagonism prior to bypass may improve (a) Peripheral Blood flow (b) Retinal circulation (i.e. decrease the incidence of microembolism) (c) Lung function.

PRESENTATIONS TO LEARNED SOCIETIES

- J B Desai, J C S Pollock.
Recent experience with the Subclavian Flap in infants with Coarctation of Aorta.
Scottish Thoracic Society, December 1980.
- J B Desai, A McKay, M Ferguson, P Wright, W Bain.
Are Venous and Arterial catheters a source of sepsis?
Society of Thoracic and Cardiovascular Surgeons of GB
Newcastle, Sept. 1981.
- J B Desai, A McKay, M Ferguson, P Wright, W Bain.
Are Venous and Arterial catheters a source of sepsis?
The Lister Club-Symposium on Surgical Infections, 1981.
- K M Taylor, M Jamieson, J B Desai, H Dawson, D Wheatley.
Biochemical assessment of brain injury during open heart surgery
Society of Thoracic and Cardiovascular Surgeons of GB
Newcastle, 1981.
- J B Desai, J Maoeksha, T Welsh.
28 year experience of closure of bronchial stumps with a low incidence
of Broncho-Pleural fistula.
Scottish Thoracic Society, Dec 1981
- J B Desai.
Risks and Results of Coronary Artery Surgery.
Scottish Thoracic Society, May 1982.
- J B Desai, R T Mathie, K M Taylor.
Hepatic Blood Flow during CPB in the Dog : A comparison of Pulsatile
and Nonpulsatile Perfusion.
European Society of Artificial Organs, Austria, Sept. 1984.
- J B Desai, R T Mathie, K M Taylor.
Hepatic Blood Flow during CPB in the Dog : A comparison of Pulsatile
and Nonpulsatile Perfusion.
World Conference on open heart surgery, Bombay, Feb. 1985.
- D Royston, J Fleming, S Westaby, J B Desai, K M Taylor.
Neutrophil Kinetics and Oxidative Injury associated with CPB.
- J Fleming, D Royston, S Westaby, J B Desai, K M Taylor.
Neutrophil Malondialdehyde content as an indicator of complement
activation during Cardiopulmonary Bypass.
11th European Society of Artificial Organs, Greece, Sept. 1985.

- J B Desai, J Fleming, D Royston, K M Taylor.
The effect of CPB on Lung Permeability- A study of 3 oxygenator types.
Cardiac Surgical Research Club, Glasgow, Nov. 1988.
- S Griffin, J B Desai, E Townsend, S W Fountain.
Reduction in Morbidity and Mortality following Oesophageal Resection.
European Society of Cardio-Thoracic Surgeons, Bordeaux, sept. 1988
- J D Roussak, J B Desai, B E Keogh, S K Ghri, R N Sapsford.
Long-Term follow up of Endomyocardial Fibrosis treated by surgery.
European association for Cardio-Thoracic Surgery, 4th Annual meeting
Naples, September 17-19, 1990.
- J B Desai, R T Mathie, K M Taylor.
Pulsatile flow does not benefit liver blood flow in hypothermic high-flow
cardiopulmonary bypass.
European association for Cardio-Thoracic Surgery, 4th Annual meeting
Naples, September 17-19, 1990.
- A G Jayakrishnan, S Kolvekar, J B Desai, A T Forsyth
Experience with Arterial Myocardial Revascularisation
2nd World Conference on Open Heart Surgery, Bombay, June 1991.
- A G Jayakrishnan, A T Forsyth, J B Desai
Coronary Artery Bypass Surgery with Arterial Conduits.
European association for Cardio-Thoracic Surgery, 6th Annual meeting
Geneva, Switzerland September 14-16, 1992.
- A G Jayakrishnan, R Ramanan, S Kolvekar, A T Forsyth, J B Desai
Experience with 88 gastroepiploic artery bypass grafts- poster
World conference on advances in coronary artery surgery- Leicester 1992
- A G Jayakrishnan, A T Forsyth, J B Desai
Complete arterial myocardial revascularisation
Society of cardiothoracic surgeons of Great Britain and Ireland
Annual meeting - Bristol, April 1993.
- R E A Smith, J B Desai, A T Forsyth, J F Martin.
Nitric oxide reduces contractility of isolated human myocardium.
- Brackenbury ET, Jayakrishnan AG, Marnham MT, Forsyth AT and Desai JB
Complications of Bilateral Internal Mammary Harvesting.
Presented to the Society of Cardiothoracic Surgeons of Great Britain & Northern
Ireland, Norwich.
- Brackenbury ET, Jayakrishnan AG, Desai JB and Forsyth AT.
Complications of the Use of the Gastroepiploic Artery as a Conduit in Myocardial
Revascularisation.
Society of Cardiothoracic Surgeons of Great Britain & Northern Ireland, Norwich
1994.
- Brackenbury ET, Desai JB and Forsyth AT.
Clinical experience in gastro-epiploic artery conduits.
The international Workshop on Arterial Conduits for Myocardial Revascularisation,
Universita Cattolica del Sacre Cuoro, Roma, Italy. November 1994.
- Rao PV, Forsyth AT, Desai JB and Marnham MT.
Early Results of Myocardial Revascularisation with Arterial Conduits Alone in 212
Patients Using Three or More Distal Anastomoses.
The International Workshop on Arterial Conduits for Myocardial Revascularisation,
Universita Cattolica del Sacre Cuoro, Roma, Italy. November 1994.

RESEARCH EXPERIENCE

Clinical

- 1 A prospective study of sepsis associated with Intravascular catheters in patients undergoing cardiac surgery was initiated and concluded. (Glasgow)
- 2 A Retrospective study of Porcine Xenograft Heart Valves inserted between 1975 and 1980 was carried out with meticulous follow-up. Apart from rates of valve failure, thromboembolism and sepsis, the importance of anticoagulation and atrial fibrillation in the development of emboli was assessed. (Glasgow)
- 3 A study of the development of Lactic Acidosis in Humans undergoing Cardio-Pulmonary Bypass was conducted. This Pilot Study indicated that the lactic acidosis is not only due to increased production by the muscles but also due to decreased liver metabolism. (Hammersmith)
- 4 I have participated in studies on neutrophil sequestration in the lungs during cardiopulmonary bypass in humans. (Hammersmith)
- 5 A retrospective review of the morbidity and mortality of surgical treatment of Oesophageal Carcinoma was conducted at Harefield and the results of oesophageal resection following instrumental perforation were assessed.
- 6 I initiated a trial to assess the usefulness of Transoesophageal ultrasound in looking at the extension of Bronchial Carcinoma into the pulmonary vessels and hence in predicting operability. Unfortunately, none of the cases studied had extension of tumour in pulmonary veins. However, I am convinced that adequate visualisation can be achieved by this relatively noninvasive procedure. (Harefield)
- 7 I have carried out a thorough retrospective study of a hundred Tracheo-Bronchial Foreign Bodies. (Harefield)
- 8 A retrospective study of the Morbidity and Mortality of Pneumonectomy for carcinoma of the lung has been completed. Special attention is being paid to preoperative needle biopsys' relevance to postoperative empyema. (Middlesex)
- 9 A prospective study of hyperamylasaemia following cardiopulmonary bypass has been completed. We looked at the effects of pulsatile flow and arterial line filters.
- 10 A retrospective review of the Gastrointestinal complications following CPB has been completed.

- A Stott, J B Desai.
 Thoracotomy: Conduct and Postoperative management.
 British Journal of Hospital Medicine, oct 1987; 38(4): 364-367.
- S Holmes, J B Desai, R N Sapsford.
 Nodular Pulmonary Amyloidosis: a case report and review of the literature.
 Br. J. of the Diseases of the Chest, 1984, vol 82; oct 88: 414-417.
- S Griffin, J B Desai, C Charlton, E Townsend, S W Fountain.
 Factors influencing Morbidity and Mortality following Oesophageal Resection.
 European Journal of CardioThoracic Surgery. 1989; 3: 419-424.
- J B Desai, SK Ohri.
 Gastrointestinal Damage following Cardiopulmonary Bypass.
 Perfusion 1990; 5: 161-168.
- S Griffin, J B Desai, E Townsend, S W Fountain.
 Oesophageal resection after instrumental perforation.
 European Journal of Cardio-thoracic Surgery (in Press).
- J B Desai, R T Mathic, K M Taylor.
 Hepatic Blood Flow during cardiopulmonary bypass in the dog: the effect of temperature, flow rate and pulsatility.
 Perfusion 1993. 8: 149-158
- A G Jayakrishnan, A Ailan, A T Forsyth, J B Desai.
 Sternal wound infections and internal mammary artery grafts.
 J Thorac Cardiovasc Surg 1993; 106: 181.
- R E A Smith, J B Desai, A T Forsyth and J F Martin.
 Nitric oxide reduces contractility of isolated human myocardium.
 British Cardiac Society, May 1994, Torquay.
 Br Heart J. 1994, 71, 71
- R E A Smith, J B Desai, A T Forsyth and J F Martin.
 Nitric oxide and the function of human myocardium.
 European Society and World Congress of Cardiology, September 1994, Berlin.
 Eur Heart J. 1994, 15 (suppl), 111.
- Brackenbury ET, Desai JB and Forsyth AT.
 Clinical Experience in Gastroepiploic Artery Conduits.
 Proceedings of the International Workshop on Arterial Conduits for Myocardial
 Revascularisation. 1994
- Rao PV, Forsyth AT, Desai JB and Martin MF.
 Early Results of Myocardial Revascularisation with Arterial Conduits Alone in 212
 Patients Using Three or More Distal Anastomoses.
 Proceedings of the International Workshop on Arterial Conduits for Myocardial
 Revascularisation. 1994

PUBLICATIONS

- K M Taylor, H Dawson, J B Desai, M P G Jamieson, J J Brannon.
The effect of Methylprednisolone on Brain damage in dog during CPB.
Clinical Science, 1982;63:60.
- K M Taylor, H Dawson, J B Desai, M P G Jamieson, J J Brannon, Mckenna.
The effect of methylprednisolone pretreatment on cerebral damage in dogs
- a double blind study
Journal of Cardiovascular Surgery. 1983; 24(6) : 622-627.
- J B Desai, R T Mathie, K M Taylor.
Hepatic Blood Flow during CPB in the dog-a comparison between
pulsatile and nonpulsatile perfusion.
Life Support Systems, 1984; 2 : 1
- D Royston, J Fleming, S Westaby, J B Desai, K M Taylor.
Neutrophil Kinetics and Oxidative Injury associated with CPB.
Thorax 1985; 40: 240
- D Royston, J Fleming, J B Desai, S Westaby, K M Taylor.
Increased production of peroxidation products associated with open heart
surgery--Evidence of Free Radical generation.
Journal of Thoracic and Cardiovascular Surgery. 1986; 91: 759-766.
- J Fleming, D Royston, S Westaby, J B Desai, K M Taylor.
Neutrophil Malondialdehyde content as an indicator of complement
activation during CardioPulmonary Bypass.
Life Support Systems, 1986; May : 257-261.
- R T Mathie, J B Desai, K M Taylor.
The effect of normothermic CPB on Hepatic Blood Flow in dogs.
Perfusion, 1986; 1: 245-253.

RESEARCH EXPERIENCE

Clinical

- 1 A prospective study of sepsis associated with Intravascular catheters in patients undergoing cardiac surgery was initiated and concluded. (Glasgow)
- 2 A Retrospective study of Porcine Xenograft Heart Valves inserted between 1975 and 1980 was carried out with meticulous follow-up. Apart from rates of valve failure, thromboembolism and sepsis, the importance of anticoagulation and atrial fibrillation in the development of emboli was assessed. (Glasgow)
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