

Curriculum Vitae

Dr. Milind S. Wagh
MBBS, MS, M.Ch (Plastic Surgery)
Consultant Plastic, Aesthetic & Reconstructive Surgeon
Reconstructive Hand & Microsurgeon



MEDICAL EDUCATION

- 1992-1994** *Bombay University, India*
Lokmanya Tilak Municipal Medical College, Sion, Mumbai
M.Ch (Plastic Surgery)
- 1988-1991** *Bombay University, India*
Topiwala National Medical College, Bombay Central, Mumbai
M.S (General Surgery)
- 1982-1987** *Bombay University, India*
Topiwala National Medical College, Bombay Central, Mumbai
M.B.B.S

FIELDS OF SPECIAL EXPERTISE

1) Reconstructive Hand and Microsurgery AND Trauma Reconstruction

- ◆ **Free tissue transfers- emergency and elective**
- ◆ **Replantations and revascularisations** of amputated limbs and digits
- ◆ Clinical applications and future possibilities in **composite tissue allotransplantations** for complex defects.
- ◆ **Expanded / Prefabricated free tissue transfer** in functional reconstruction as well as aesthetic surgery.
- ◆ Physiology and clinical applications of the process of **controlled angiogenesis**.
- ◆ **Congenital hand anomalies** --- salvage of function & rehabilitation.
- ◆ **Functional reconstructions** in **post burns** hand and extremity deformities.
- ◆ Cosmetic rehabilitation using plastic surgery including tissue expansion, free tissue transfers & Prefabricated flaps in severe composite tissue losses **in burns**.
- ◆ Complex post-traumatic hand injuries and reconstructions / rehabilitation.
- ◆ Mechanics of tendon transfers in peripheral nerve injuries, brachial plexus injuries and post-infective palsies.
- ◆ Functional and aesthetic reconstructive options in post- ablative defects in Head-Face-Neck tumours including composite free tissue transfers.

2) Aesthetic Plastic Surgery

- ◆ Breast augmentation by breast implants
- ◆ Aesthetic Breast reduction surgeries
- ◆ Breast ptosis correction (correction of sagging breasts)
- ◆ Aesthetic rhinoplasty and nasal cosmetic surgery
- ◆ Body contouring and Liposculpture by surgical lipectomies, body lifts and liposuction
- ◆ Blepharoplasty (Aesthetic eyelid surgery)
- ◆ Eyelid Ptosis correction
- ◆ Soft tissue filling and contour corrections by fat injections and use of fillers.
- ◆ Facelifts, Browlifts, Necklifts
- ◆ Surgical and non-surgical facial rejuvenation
- ◆ Ear reconstruction in congenital absence /deformities and acquired deformities
- ◆ Dermabrasion for facial contour deformities, acne scars etc

EXPERIENCE IN PLASTIC & RECONSTRUCTIVE SURGERY

Major Surgeries/Operations Performed

- Aesthetic Surgeries
- Microvascular Surgeries
- Hand Surgeries
- Cranio-Maxillo-Facial Surgeries & HFN Reconstructions
- Cleft lip & Cleft palate surgeries
- Flap Surgeries

RESEARCH WORK BEING UNDERTAKEN * / SUPERVISED AT PRESENT**

1. Cadaver dissection to elucidate the anatomy of the muscles of the palate with view to analysing the possibility of abnormal neuromuscular anatomy in cases of cleft palate. * / **
2. Analysis of the recovery of neuromuscular function, especially return of ulnar/median intrinsic motors following extensive “spaghetti wrist” injuries in the hand – A single surgeon trial. *
3. Comparison of different tendon transfers for intrinsic replacement in post-traumatic and post-Hansens’ median and ulnar nerve palsies. *
4. Analysing the return of sensorimotor function following replantations in the upper extremity – A clinically graded & electrophysiologically assessed study with the assistance of the Dept of Occupational Therapy and Physiotherapy – A two surgeon trial. *
5. Comparison of the Reneurotization in Pedicled Flaps versus Sensate Free flaps. **

CURRENT ACADEMIC PROJECTS

1. Co-authoring a book on Plastic Surgery for undergraduates titled “Short Notes in Plastic Surgery”.
2. Co-authoring chapters on “Replantation of amputated limbs and digits” and on “Fasciocutaneous Flaps – Evolution & Development” in a Textbook of Plastic Surgery.
3. Preparing a database on hand injuries over a period of twelve years (1994-2005) in a major metropolitan trauma center.
4. Preparing a database of the patterns of maxillofacial trauma over the last decade (1994-2004) in a major metropolitan trauma center with the assistance of the Department of General Surgery.

ACADEMIC DISTINCTIONS AND AWARDS

Fellowship in Microsurgery	Fellowship of 1 year for advanced training in clinical microsurgery and microsurgical research successfully completed at St. Vincent’s Hospital, Melbourne, Australia & the Bernard O’Brien Institute of Microsurgery, Melbourne, Australia. (February 1997-January 1998)
M.Ch (Plastic Surgery)	Second Rank among all candidates appearing at the Bombay University examination, May 1994
M.S (General Surgery)	Second rank among candidates appearing from T.N.M College for the Bombay University examination, Jan 1991

HIGHLIGHTS IN PLASTIC SURGICAL & MICROSURGICAL CAREER
AFTER RETURN FROM MELBOURNE, AUSTRALIA

1. A total of 1219 cases of microneurovascular surgery have been operated at LTMG Hospital between Feb 1998- August 2005 by me or under my supervision. A success rate of 93.8 % (211 out of 225) for free flaps; 85.7 % (175 out of 204) for all replantations and 95.1% (175 out of 184) for revascularisations has been obtained thus far. **These are the highest statistics for the city of Mumbai & the state of Maharashtra and are comparable to the best in the world.**
2. **Personally** performed 203 free tissue transfers (free flaps), 186 cases of extremity/hand/single or multiple digit replantations & 145 cases of extremity revascularisation between Feb 1998 – August 2005 at LTMG Hospital, Sion, Mumbai.
3. As Microsurgery fellow at the O'Brien Institute of Microsurgery, Melbourne, Australia in 1997-98, I was an active member of the reconstructive microsurgical team under Professor Wayne A. Morrison in the marathon 25 hours long successful surgery to replant the completely avulsed scalp and face of a young 25 year old Australian girl. The case received wide favorable media attention in Australian as well as international newspapers and television. The team received personal felicitations from the Prime Minister of Australia, Mr. John Howard.
4. Performed the **first** microvascular free **fascial** flap transfer for **primary repair** of a cleft palate **in the world** in October 1998 at LTMG Hospital, Sion, Mumbai. Since then, one more case has been successfully done.
5. Performed the **first** clinical microvascular composite segmental tracheal reconstruction for complete cervical tracheal loss using a prefabricated radial artery forearm flap **in the world** in August 2000. This attempt was partially successful.
6. Performed the **first** Emergency free flap surgery (within 6-8 hours of injury) in the history of Municipal / Public Hospitals in Mumbai in August 1998 at LTMG Hospital, Sion, Mumbai. Since then, forty four (44) more emergency cases have been successfully performed.
7. Performed the **first** microvascular 2nd toe transfer for reconstruction of an amputated thumb in the history of Municipal / Public Hospitals in Mumbai in February 1999. Since then, 8 more cases have been successfully carried out.
8. Performed an **extremely rare** operation involving replantation of 4 amputated fingers of either hand,,i.e 8 fingers in March 2001..... 3 fingers of the Right hand and 2 fingers of the Left hand could be successfully replanted after a marathon 21 hours effort.
9. **University Teacher for M.Ch (Plastic Surgery) degree course of the University of Mumbai** with one student per year since 1996. **Eligible to be teacher for DNB (Plastic Surgery)**

PUBLICATIONS

- 1) Identical unusual subtotal penile amputation in children: a report of four cases;
Dr R. L. Thatte, **Dr M. S. Wagh**, Dr N.D. Kulkarni
British Journal of Plastic Surgery (1993), 46, 535-537
- 2) Congenital midline palatomandibular fusion with a mandibular cleft and a bifid tongue;
Dr S Rao, Dr S.Oak, **Dr M. Wagh**, Dr B.K. Kulkarni
British Journal of Plastic Surgery (1997), 50, 139-141
- 3) Encyclopedia of Flaps, 2nd Ed., Lippincott-Raven Publishers, Philadelphia, 1998
Editors: B. Strauch , L. Vasconez & E. Hall-Findlay,
Chapter 441 (pg 1720-3) on “The Saphenous Venous Flap”
Dr R .L .Thatte, **Dr M. S. Wagh**, Dr M.R. Thatte
- 4) New source of vein graft for rabbit experimentation
Tanaka Y, Crowe DM, **Wagh M**, Morrison WA
Microsurgery 1999,19:4, 167-70

- 5) The beneficial anti-inflammatory effect of dexamethasone administration prior to reperfusion on the viability of cold stored skin flaps.
G Willemart, KR Knight, M Ayad, **M Wagh**, WA Morrison.
International Journal of Tissue Reactions 1999, 21:3,71-8.
- 6) Cold storage of rat skeletal muscle and pre-ischemic perfusion with modified UW solution"
M Wagh, G Pantazi, R Romeo, JV Hurley, WA Morrison , KR Knight,
Microsurgery 2000,20:7,343-9.
- 7) Inducible nitric oxide synthase (iNOS) activity promotes ischaemic skin flap survival
Kane AJ, Barker JE, Mitchell GM, Theile DR, Romeo R, Messina A, **Wagh M**, Fraulin FO,
Morrison WA, Stewart AG
British J of Pharmacology 2001, April 132:8, 1631-8.
- 8) Successful free latissimus dorsi muscle flap for upper extremity cover in a pregnant patient at 14 weeks gestational age.
Dr M.S.Wagh, Dr Manohar Velury, Dr Varun Dixit, Dr Bibhuti B. Nayak, Dr Mukund Jagannathan
European Journal of Plastic Surgery, Vol 26:5, Sept 2003, Pg 268-70
- 9) Bradycardia following temporomandibular joint ankylosis release
Mukund Jagannathan, Bibhuti Nayak, Varun Dixit and **Milind Wagh**
European Journal of Plastic Surgery, Vol 26:6, Nov 2003, Pg 324-325
- 10) A prospective study of early postoperative complications in 400 consecutive operative procedures for cleft lip and palate correction.
Dr M. S. Wagh, Dr R. L. Thatte
Sent to British Journal of Plastic Surgery, April 2005 for publication.
- 11) A single surgeon analysis of 60 cases of spaghetti wrist injuries in terms of recovery on a 2 year follow-up"
Dr M. Wagh
Sent to British Journal of Plastic Surgery, May 2005 for publication.

RESEARCH WORK UNDERTAKEN AT BERNARD O'BRIEN INSTITUTE OF MICROSURGERY, MELBOURNE, AUSTRALIA: FEB 1997 – JAN 1998

1. A project to study
 - (i) a new epigastric flap model of Angiogenesis in mice with respect to the roles and effects of Nitric Oxide (NO) and Nitric Oxide Synthetase (NOS) on angiogenesis using wild type mice vs genetically manipulated iNOS knockout mice
 - (ii) assess the effects of various NOS inhibitor drugs on this process.
2. A microsurgical project in two different strains of rats (Dark Agouti as donors vs Lewis as recipients) to (i) study the possible induction of long-term donor-specific immunotolerance in osteoplastic orthotopic free vascularised knee allotransplants across a major histocompatibility barrier following short-term administration of a new combination of strong immunosuppressant drugs and (ii) investigate the possibility of antigenic modulation and/or cell replacement in the surviving allografts by undertaking a second free vascularised knee transplant to a second Lewis recipient.
3. A project on Ischemia-Reperfusion to study the effect of different periods of cold storage prior to revascularisation/replantation of FREE inferior epigastric skin flaps and FREE gastrocnemius muscle flaps in rats and assess the degree and reversible extent of Apoptosis in cold stored flaps.
4. A study of the effect of arachnid envenomation with three types of spiders on rat epigastric flaps exposed to ischaemia as a second injury.