The WSRM Newsletter
Spring-Summer 2016
Volume 7, Issue 8

World Society for Reconstructive Microsurgery

David Chwei-Chin Chuang, M.D.
President WSRM

Message from the Editor

Dear Members of the WSRM:

Time passes quickly. I have been the President of WSRM for more than one year since I was elected in the 8th WSRM Congress Meeting in Mumbai, India on March 21, 2015. By this opportunity I would like to briefly tell you what our Society has done and what we continue to move forward with for our society heartily and enthusiastically. There are three major things that occurred during this first year:

(1) Pre- or Post-Congress Symposia with Four Regional Societies
To assure the vitality of The Society and The World Congress, WSRM decided to have a "WSRM Pre- or Post-Congress Symposium" with the Regional Societies to strengthen ties between the Central WSRM and four Regional Societies. Both WSRM and Regional Societies can share the benefits simultaneously. The first WSRM pre-Congress symposium was held in Mexico City, cooperated with the 2nd ALAM (Associations of Latino-American Microsurgery) on November 25, 2015. The local President was Dr. Eric Santamaria. The 2nd symposium was a post-Congress symposium, cooperated with the 2015 Annual Meeting of ASRM (American Society for Reconstructive Microsurgery) in Scottsdale, Arizona, USA on January 19, 2016. The local President was Dr. Gregory Evans. The 3rd symposium was a pre-Congress symposium, cooperated with the 13th EFSM (European Federation of Societies for Microsurgery) in Antalya, Turkey on April 21, 2016. The local President was Dr. A. Kadir Bacakoglu. The 4th symposium was a pre-Congress symposium, cooperated with the 3rd APFSRM (Asian Pacific Federation of Societies for Reconstructive Microsurgery) in Beijing, China on June 2, 2016. The local President was Dr. Chang-Qing Zhang. I sincerely appreciate the four local Presidents for their enthusiastically great help to make all the symposia successful and prosperous. Many unexpected microsurgeons attended, especially many young microsurgeons.

(2) The 2016 Task Force and "Task Force Committee"
For the future of WSRM, to push WSRM as an umbrella organization for all microsurgeons around the world and to investigate means by which we might restructure WSRM to make it a more inclusive international organization, we had a "Strategic Planning" meeting in Scottsdale, Arizona on January 15, 2016. It was a whole afternoon meeting (from 2:00 to 7:30 PM), one day before the 2016 ASRM meeting (January 16-19). We invited Mr. Tom Nelson, a strategic consultant, for direction. Since then, we set up the "WSRM Task Force Committee" and Dr. Robert Walton and Dr. Gregory Evans are Co-Chairs to help the

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President be in charge of the work. The aim of the committee is to look at the governance and financial stability of WSRM. Some conclusions were made during the "Task Force" meeting, including (1) it is agreed that WSRM should keep its original name; (2) WSRM's educational initiatives including the Biennial Meeting and pre- and post-Congress symposia with regional and/or national microsurgical society meetings; (3) to support a WSRM marketing campaign to strengthen its identity as a major organization representing Microsurgery and Complex Reconstruction; (4) to consider the issue of the WSRM dues structure and to investigate the feasibility and potential financial impact on WSRM of a modified dues structure based on the socioeconomic realities of a member's home country; (5) a yearly white paper on important, relevant topics in microsurgery with possible growth to a WSRM Journal; and (6) Service Initiative, including service to local hospitals, service to teaching local surgeons, accepting candidates for short-term or long-term service and patient service, etc.

(3) "Fu-Chan Wei Lectureship" Award in WSRM and its Committee

Learning from ASRM, which has given the "Dr. Harry Buncke Lectureship" since 2000, we started to set up a similar award given by the WSRM this year, named the "Fu-Chan Wei Lectureship" award in 2016, sponsored by the Chang Gung Club and Chang Gung Department of Plastic Surgery to honor Professor Wei's remarkable contributions in the field of reconstructive microsurgery. We established the "Fu-Chan Wei Award Nominating Committee" to be in charge of the work. Dr. Isao Koshima is the Chair of this committee. Every two years the committee will select one winner who has made great contributions to reconstructive microsurgery. The first winner is Dr. Ronald Zuker.

The WSRM has involved the world's major groups of reconstructive microsurgeons. It provides the most wonderful opportunities and benefits to many microsurgeons to share and change their thoughts, ideas and techniques; to meet many pioneers in different specialized fields; and to get acquainted with many friends from different countries. I sincerely hope that the Congress will continue to grow forever, and that WSRM members will appreciate the value and significance of being a WSRM member. Finally, don't forget to join in the forthcoming 9thWorld Congress Meeting in Seoul, Korea in June 14-17, 2017 (www.wsrm2017.com). I look forward to seeing all of you in Seoul.

David CC Chuang, M.D.
President, WSRM, 2015-2017.

WSRM Endorsement Microsurgery Seminars, Meetings & Workshops Worldwide

WSRM is making an effort to show its support of the various microsurgery activities and meetings that take place around the world. Please visit www.wsrm.net to view the endorsement guidelines. A formal request must be submitted addressing the guidelines stated and your qualifications. The WSRM will not endorse a meeting within the same region and within one year of the biennial congress. The WSRM will only endorse national meetings.

Liaison Update

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2017 Congress Preview - Seoul, Korea

Important dates

Congress Date	June 14(Wed)-17(Sat), 2017
Registration Opens	July 1, 2016
Abstract Submission Opens	July 1, 2016
Abstract Submission Closed	October 31, 2016
Early bird registration up to	January 1, 2017
Acceptance of abstracts	December 1, 2016
Hotel reservation starts	September 1, 2016

Registration

JULY 1, 2016 **Online Registration Opens !**

Category	Early Bird (Up to Jan 01, 2017)	Regular (~Apr 30, 2017)	Onsite (May 1, 2017~ Spot)
WSRM Member	US $ 650	US $ 750	US $ 850
WSRM Non Member	US $ 750	US $ 850	US $ 950
Resident/ Fellow/ Allied Health Professional	US $ 300	US $ 400	US $ 450
Medical Student	US $ 200	US $ 250	US $ 300
Accompanying Person	US $ 300	US $ 300	US $ 400

Call for Abstracts

JULY 1, 2016 **Online Submission Opens !**

TOPICS

- Basic Research
- Head and Neck
- Trunk and Chest wall
- Breast
- Hand and Upper Extremity
- Lower Extremity
- General
- Flaps
- Lymphatic Surgery
- Nerve and Brachial plexus
- Vascularized Composite Allotransplantation
- Microsurgery Training
- Supermicrosurgery
- Aesthetic Microsurgery

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Please mark your calendars and don't miss the chance to benefit from the early registration rate !
Please visit www.wsrm2017.com for further information.

Mini Review

The President, David C. C. Chuang, MD

From Debates to (my personal) Conclusion in Peripheral Nerve Injury and Reconstruction – A 30 year Experience at Chang Gung Memorial Hospital.

Introduction

There has been much improved in peripheral nerve injury and reconstruction since 1970 after application of the operative microscopy. Improvement includes new technologies of imaging study (CT and/or MRI), electrodiagnosis (preoperatively and/or intraoperatively), chemistry (histochemical, immunochemical and biochemical), molecular biology (e.g. neurotrophism and neurotropism), pathology, pharmacology, increased understanding of peripheral nerve structures (microanatomy), pathophysiology of nerve and muscle (denervation and reinnervation), better magnification (surgical loops and microscope), better instruments (micro-instruments and sutures materials), microsurgical neurovascular skills and nerve reconstruction strategies such as nerve transfers and functioning free muscle transplantation, and more respect of postoperative rehabilitation. Therapeutic approach of the peripheral nerve injury has significantly changed with more optimism in results. However, there are still many questions but few answers to scientists, and many debates but few conclusions to clinicians in the peripheral nerve science.

I started my microsurgical careers in peripheral nerve injury and reconstruction in 1984 after I had one year fellowship training with Julia K. Terzis. Till now I have performed many reconstructive microsurgeries for peripheral nerve injuries, including over 2000 cases of adult brachial plexus exploration and reconstruction, over 1000 cases of functioning free muscle transplantation for different places (face, upper and lower limbs), more than 500 cases of obstetrical brachial plexus palsy reconstruction (including early nerve reconstruction and late palliative reconstruction) and enterovirus brachial plexus neuritis treatment. Thousands of surgical cases related to the peripheral nerve injury and reconstruction have been performed, including peripheral nerve sheath tumors, facial paralysis, and compression neuropathy such as thoracic outlet syndrome, cubital tunnel syndrome, carpal tunnel syndrome and many peripheral nerve injuries such as radial nerve, median, ulnar, femoral, posterior tibial nerve, and common peroneal nerve. As a clinician and scientist, from a rookie to a recognized expert, it took me about 30 years.

In this CME, I will deal with some debates in the field of peripheral nerve science and make my personal conclusions. Hopefully, this conclusion can partly be your conclusion in the future.

Debate 1: Degree of Peripheral Nerve Injury

It was originally introduced by Seddon in 1943, and was later amplified by Sunderland in 1968 based on the disrupted internal structures. The prognosis for functional return was highly correlated with the degree of nerve injury. Sir Herbert Seddon made classification of peripheral nerve injury into three types:

1. **Neurapraxia:** affecting largely the myelin sheath, causing segmental demyelination, no loss of axonal continuity, no Wallerian degeneration, no detectable morphological changes, only a localized conduction block, nerve conduction proximal and distal to the lesion is preserved, recovery is rapid and impulse conduction return is complete within days or weeks;
2. **Axonotmesis:** loss of axonal continuity, but basal lamina preserved, chromatolysis of cell body, retrograde axonal degeneration for a few millimeters proximal to the lesioned site, Wallerian degeneration of the axons distal to the lesion, complete conduction block, Schwann cell proliferation to form cellular columns (Bands of Büngner) to guide the regenerating axon within the basal lamina tube, nerve sprouts but no neuroma, complete nerve recovery within months.
3. **Neurotmesis:** complete anatomic severance of the nerve, no recovery is expected without surgical coaptation, distal degeneration and some degree of proximal degeneration, neuroma formation.

Sir Sydney Sunderland expanded Seddon's axonotmesis into two separate degrees of injury based on the ability of the nerve to recovery (i.e., completely or partially). He also expanded Seddon's neurotmesis into other two separate degrees of injury based on nerve lesion in continuity. There were five degrees of peripheral nerve injury: Sunderland 1 to 5. Mackinnon in 1989 added a sixth degree injury, a mixed nerve injury composed of fascicles of varying degrees of nerve injury.

To me, Sunderland's 3rd degree of injury is mysterious. It is related to timing of nerve exploration. It might be getting better from Sunderland 3 up to Sunderland 2 or 1 by time, or getting worse from Sunderland 3 down to Sunderland 4 or 5 by time. Many researches were focused on the Sunderland 3. Starting from Sunderland 3 injury it has aberrant reinnervation, causing co-contracture which is commonly found in the sequelae of OBPP with deformity of shoulder and elbow, and post paralysis facial synkinesis. By highlighting the Sunderland 3 injury, I intentionally shift the Sunderland 3 into one of neurotmesis in 2006 (Figure 1) based on infrastructural site of injury: Sunderland 3 injury is disruption of nerve fiber, called endoneurium neurotmesis; Sunderland 4° injury is disruption of nerve fascicle, called perineurium neurotmesis; Sunderland 5° injury is disruption of nerve trunk, called epineurium neurotmesis. (Fig. 1)

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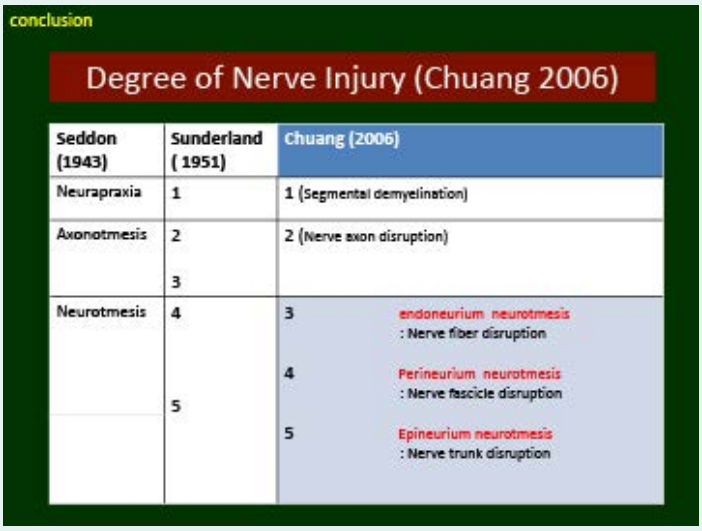
My conclusion here is that I still accept the Sunderland classification, but making a different explanation.

Figure 1



Debate 2: Timing of Nerve Repair

There are many controversies related to timing of nerve exploration. There are no absolute rules, depending on type of injury, patient condition, associated injury and others. The general principle is that more delay will cause more scars at the lesioned site, more central neuron death due to absence of neurotrophic factors, more end organ (skin and muscle) degeneration, and poor recovery even after nerve repair. However, the earlier repair sometimes causes poor results due to uncertain stump health. Because of these, I classify five times for nerve repair:

1. **Immediate nerve repair or repair within (two) days:** indicated in sharply transected nerve with open wound which causes sensation or motor loss. If it associates with artery rupture, it can be performed with immediate vessel and nerve repair, or immediate vessel repair, but nerve repair within days.
2. **Early nerve repair within a month:** indicated in closed wound with known nerve severance during primary wound repair or artery repair from history taking. There is no need to do further investigation. For example, radial nerve palsy associated with humeral fracture which has been openly reducted and radial nerve severance was noted but without repair; or infraclavicular brachial plexus injury with vessel rupture which has been repaired.
3. **Delayed early nerve repair within 5 months:** indicated in closed traction wound with unknown nerve injury, such as closed type of brachial plexus injury and radial nerve injury, if stagnation of Tinel's sign following 2-3 months of follow-up.
4. **Late nerve repair more than 6 months after injury:** nerve repair is still possible, but additional procedure to enhance the result is often needed. Longer rehabilitation is anticipated.
5. **Chronic nerve repair one year after injury:** it is usually due to late referrals, nerve surgery having been performed but with failed recovery, or complications of associated injury treatment such as head injury, electric burn, osteomyelitis, abdominal surgery complication, joint stiffness, pain problem, psychiatric disturbance, et cetera. Stage reconstruction is usually required, for example, nerve elongation first, then functioning free muscle transplantation, or tendon or muscle transfer, or arthrodesis etc. palliative reconstruction. Long-standing facial paralysis and reconstruction is one good example.

Debate 3: Technique of Nerve Repair

There are four types of nerve suture: epineurial, perineurial, epi-perineurial and group fascicular repairs. There is still no consensus which one is superior to another. To me, it is not always a significant factor. The important point is the accuracy of the suture approximation. The following conditions are frequently encountered during the nerve repair:

1. One-to-one nerve suture with similar size or mild discrepancy of stumps (Fig. 2)

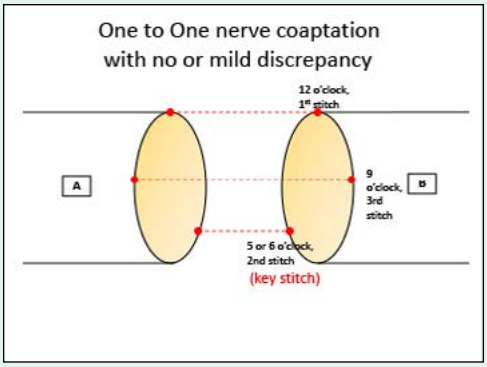


Figure 2

2. One-to-one nerve suture with significant discrepancy of stumps: using pencil-shape trimming technique (Fig. 3)

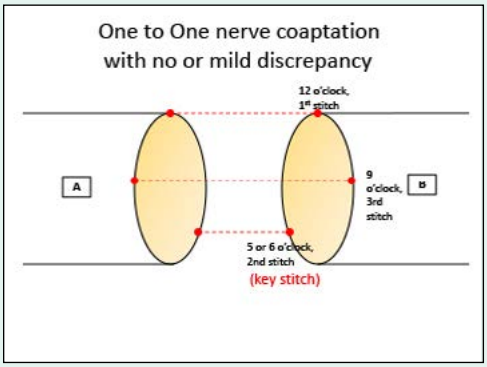


Figure 3

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3. Multiple small nerves to one big nerve suture: using pencil-shape trimming technique (Fig. 4 A-B)

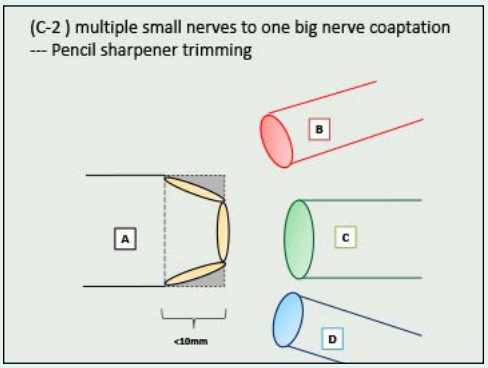


Figure 4a

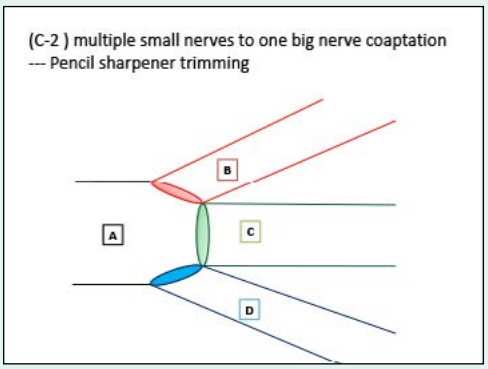


Figure 4b

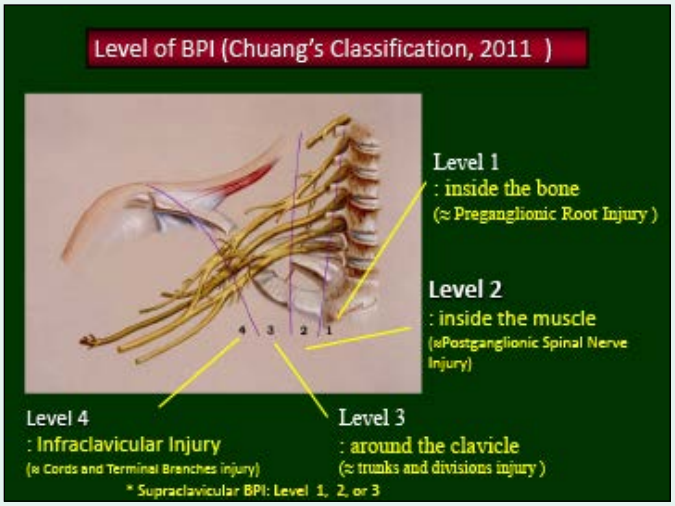
Keep points for nerve suture:

1. Epineurectomy first: resect (strip away) the external epineurium (several layers of loose connective tissues) circumferentially until the layer of normal epineurium (internal epineurium) with longitudinally oriented vessels on it; stop the bleeders with micro-bipolar forceps.
2. Stitch always sutured at internal epineurium layer (or epi-perineurium layer in acute stage because the perineurium is too thin to be separated from internal epineurium)
3. The 2nd stitch is a key stitch following the first stitch, always at the posterior wall of both stumps, to invert the stump surface; then apply the 3rd stitch for the opposed site.
4. Usually, 2-3 stitches enough for stump approximation
5. Always tension-free suture: graft length is not as significant factor as we might think. Interposition grafting has been shown to be superior to suturing under tension
6. Number of cable grafts: for median nerve, 5 to 6; radial or ulnar nerve, 3 to 4; musculocutaneous nerve, 3; axillary nerve, 2 cable grafts; suprascapular nerve, 1 nerve graft.

Debate 4: Level of Brachial Plexus Injury

Various classifications of the level of BPI have been proposed, e.g. two levels as supraclavicular and infraclavicular; three levels as supra-, retro- and infraclavicular; four levels as preganglionic root, postganglionic root, trunk and division, cord and terminal branches, etc. The most confusing aspect is the so-called postganglionic root. In fact, after the dorsal root ganglion, both ventral and dorsal roots continue for only a few millimeters (<5 mm) in distance and unite to become a mixed nerve where it is no longer a root. Therefore, the components of the brachial plexus are roots, spinal nerves, trunks, divisions, cords, and terminal branches. To avoid anatomical confusion, in Chang Gung we have described brachial plexus lesions with "number," Level I-IV, instead of word description (Fig. 5).

Figure 5



Level I injury: inside the (vertebral) bone; it is preganglionic root injury including spinal cord, rootlet, and root. It requires laminectomy to see the nerves.

Level II injury: inside the (scalene) muscle; it is postganglionic spinal nerve injury, located at the interscalene space proximal to the suprascapular nerve. It requires segmental resection of the scalene anterior muscle to see the nerves.

Level III injury: pre- and retroclavicular; it includes trunks and divisions. It requires osteotomy of the clavicle to see the nerves.

Level IV injury: infraclavicular; including cords and terminal branches, injury proximal to the axillary fossa. It is usually an isolated level injury with high incidence of scapular fracture, vascular injury, and glenohumeral dislocation. Difficult dissection and long nerve grafts are frequently encountered.

The term "supraclavicular BPI" will cover a large zone of injury, including Level I, II,or III lesions.

(This article has been published in: Chuang DCC. Brachial Plexus injuries: adult and pediatric. In Naligan PC, Chang J and Van Beek AL (eds): Plastic Surgery. Elsevier: London; the 3rd Edition, Volume six, 2013.)

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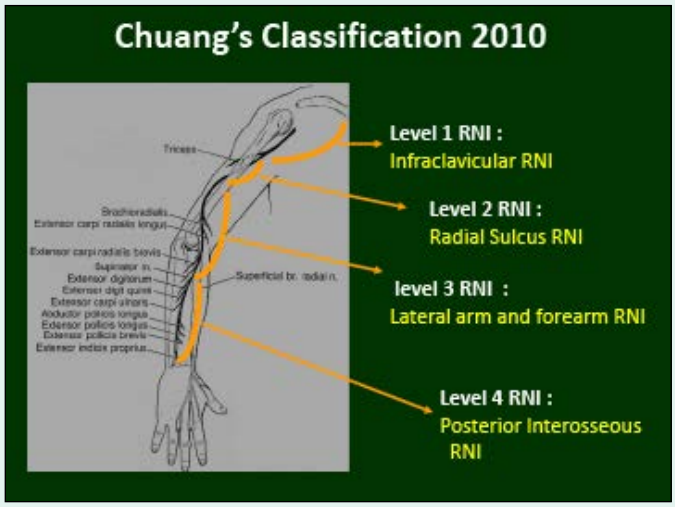
Debate 5: Level of Radial Nerve Injury

The radial nerve receives nerve fibers from C5 to C8 (and occasionally T1) nerve roots. The definition of the radial nerve should theoretically include the infraclavicular radial nerve as a whole. Based on this, four levels of RNI have been classified by their anatomical characteristics and related clinical pictures (Fig. 6):

Figure 6



Level 1, infraclavicular Radial Nerve Injury (from emergence of the posterior cord infraclavicularly to the inlet of the humerus spiral groove): Infraclavicular RNI may cause all palsies of elbow, wrist and digital extensions.

Level II, Humerus Spiral Groove Radial Nerve Injury (from inlet to outlet of the spiral groove of the humerus): Injuries here are very often accompanied by humerus bone fracture, and cause palsies of wrist, finger and thumb extension, but elbow extension is usually spared, because nerves to the long and/or to the medial heads are already branching out before entering the groove.

Level III, Lateral Arm and Antebrachial Fossa Radial Nerve Injury (from outlet of the radial nerve to the humeroradial joint): Fractures of the middle and middle-distal parts of the shaft have a significantly higher association with radial nerve palsy. Radial nerve injury in this level may cause palsies of thumb and finger extension. Wrist extension may or may not be spared. If spared, it will induce wrist extension.

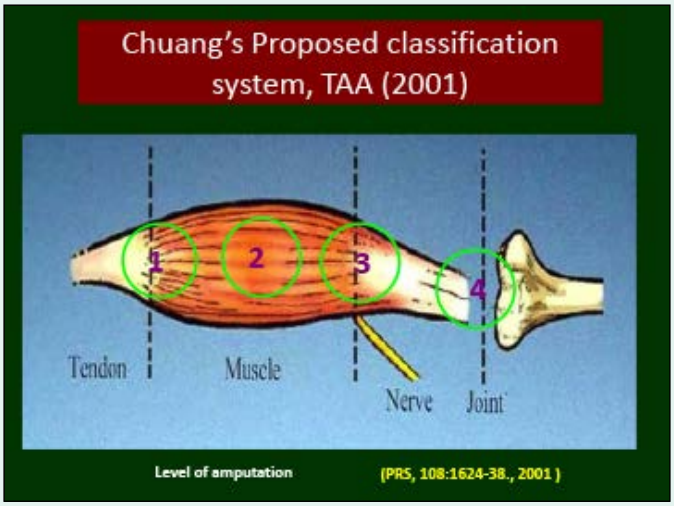
Level IV Injury: Posterior Interosseous Nerve Radial Nerve Injury (terminal radial nerve branch distal to the branch to ECRB): Radial nerve injury in this level will cause palsies of thumb and finger extension, but wrist extension is intact with radial deviation.

(This article has been published in: Outcomes of nerve reconstruction for radial nerve injuries based on the level of injury in 244 operative cases. Journal of Hand Surgery (European volume), 2010, 35(5):385-91)

Debate 6: Classification of Traction Avulsion Amputation of the Major Limb

Traction avulsion amputation occurs when amputation is by traction force and causes bone, muscle, and skin avulsion amputations at different level. Traction avulsion amputation of the major upper extremity is distinguished both clinically and prognosticatively from the guillotine or circular amputation in which all tissues are sharply divided at the same level. With the advent of functioning free muscle transplantation, secondary reconstruction for the residual deformities of patients with traction avulsion amputation has been approached aggressively for better functional outcome. Through this, a new classification system was developed to reflect the pattern of injury, management, and prognostic significance. The classification is based on the disruption points of the muscles and their innervated nerves and not on the level of bone fracture (Fig. 7):

Figure 7



Type I amputation: avulsion at or close to the musculotendinous aponeurosis with the muscle remaining intact and functional. Tendon sutured to muscle is feasible.

Type II amputation: avulsion within muscle bellies but distal to the neuromuscular junction, with the proximal muscles still being innervated. The motor nerve refers to the anterior interosseous nerve in the forearm, and the musculocutaneous nerve in the arm. Muscle-to-muscle sutures are mostly useless. Half of patients need 2nd stage of functioning muscle transplantation.

Type III amputation: avulsion within the muscles proximal to the neuromuscular junction, with the entire muscle being denervated. In this type of amputation, remove the whole muscle and try to close the wound primarily. All require 2nd stage of functioning muscle transplantation.

Type IV amputation: amputation through the elbow or shoulder joint (disarticulation amputation): external fixation, immediate flap (skin or myocutaneous flap) for wound coverage after vessel and nerve repairs are required.

(this article has been published: Chuang DCC, Lai JB, Cheng SL,

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Jain V, Lin CH and Chen HC. Traction avulsion amputation of the major upper limb: a proposed new classification, guidelines for acute management and strategies for secondary reconstruction. Plast Reconstr Surg 108(N0. 6): 1624-1638, 2001.)

Debate 7: Proximal Nerve Transfer vs Distal Nerve Transfer in Brachial Plexus Injury

The definition of proximal nerve transfer is the nerve transfer where its nerve coaptation is in the brachial plexus zone (supraclavicular or infraclacivular fossa); distal nerve transfer is the nerve transfer where the nerve coaptation site is close to the neuromuscular junction (close-target nerve transfer) outside of the brachial plexus zone. The proximal nerve transfer, a traditional approach basically for both diagnosis and treatment, has the distinct advantage of a large amount of axons available for transfer if a healthy spinal nerve is found, and relies less on brain plasticity as native function is used for reconstruction. Proximal nerve transfers demand supraclavicular or infraclavicular scar dissection and identifying healthy available spinal nerves for nerve grafting and nerve transfer. Distal nerve transfer is basically for surgical treatment. The distal nerve transfer avoids the use of a nerve graft, is technically much easier to perform and might prevent some of the target muscle atrophy due to shorter regenerative distance and time. However, the distal nerve transfer might sacrifice some of the donor function and provides a smaller number of donor axons compared to proximal nerve transfer. The theoretical advantages and disadvantages of both treatments were debated extensively in the literature.

The conclusion here is we advise combined approaches. If indicated, supraclavicular (or infraclavicular) approach to obtain accurate diagnosis, proximal nerve transfers to achieve shoulder function. Then distal nerve transfer in incomplete root avulsion of brachial plexus injury to achieve quick elbow function.

Debate 8: Postparalysis Facial Synkinesis (PPFS) Related to disputed terminology

There are many similar terms to describe the same defect, such as post paralytic facial nerve syndrome, facial synkinesis, hemifacial synkinesis, aberrant facial nerve regeneration syndrome, secondary hemifacial spasm, post-facial palsy synkinesis, post-paralytic facial synkinesis, post-facial paralysis synkinesis, or post paretic facial synkinesis, regenerated post paralytic facial nerve syndrome, or contractures and synkinesis of the facial muscle. Since PPFS represents a wide spectrum of unwanted facial movements after recovery of facial palsy from any etiology, “post paralysis facial synkinesis” is more accurate for its terminology.

Related to the treatment

Post paralysis facial synkinesis (PPFS) is a healing process of facial nerve injury with many various presentations. It is like scar formation, which is also an end result of a healing process. Not all scars are treated conservatively, where some bad and ugly scars should be treated by more aggressive procedure, such as wide excision and reconstruction with local or distant flap. Likewise, treatment of PPFS is the same. Some severe types require more aggressive approaches, such as radical excision of the synkinetic muscles (myectomy) and synkinetic nerves (neurectomy) and reconstructed by functioning free muscle for facial reanimation, like treatment for chronic facial paralysis. I have started its observation and treatment since 1986. We classify the PPFS into four Patterns (I-IV) based on quality of smile and degree of synkinesiss:

Pattern I, good smile (at least 4 teeth visible) and mild synkinesis;

Pattern II, acceptable smile (2-3 teeth visible) but moderate to severe synkinesis;

Pattern III, unacceptable smile (0-1 teeth visible) and severe synkinesis; and

Pattern IV, poor smile (0 teeth visible) but accompanying with mild synkinesis.

For Pattern I and some Pattern II patients, I do treat them with Botox. They usually showed a short-term follow-up (less than 2 years) after first time injection. They keep seeing further treatment. They just don’t want to have repeated injections for their follow-up period after explaining to them that Botox injections are only for symptomatic relief treatment, not for cure. Yet, some of them were treated also by myectomy of orbicularis oculi, platysma, corrugators, or zygomaticus major muscle to decrease requirement of frequent Botox injections.

Only Pattern III and some Pattern II required more aggressive procedure. I have advocated taking more aggressive approaches for PPFS treatment if you are aiming at good and long term results, in comparison to only Botox and rehabilitation treatment. Extensive myectomy and neurectomy and then gracilis FFMT innervated by the Cross face nerve graft, or spinal accessory nerve, or masseter nerve. Removing the trigger muscle(s) or target muscles can effectively and significantly decrease the synkinesis. This is the principle of myectomy. Removing the innervated nerve(s) can paralyze the synkinetic muscles, and consequently decrease degree of synkinesis. This is the principle of selective neurectomy. BT-A injection, rehabilitation and other additional aesthetic surgeries are only our adjuvant therapy to improve the result. But to the surgeons, correction of synkinesis should always be prior to treatment of asymmetry.

(This paper has been published in: Chuang DCC, Chang TNJ and Lu JCY. Postparalysis facial synkinesis: clinical classification and surgical strategies. PRS Global Open (www.PRSGlobalOpen.com) (DOI:10.1097/GOX.0000000000000283) 1-14, 2015).

WSRM SERVICE INITITATIVE – CALL FOR VOLUNTEERS

WSRM has a new initiative to sponsor surgical missions to needy world areas to perform complex microsurgical reconstructions. The team would provide care to needy patients and also provide education in approach to management of complex disorders for the local surgeons and support staff. The support for these mission trips would need to come from donations from individuals and major health organizations and industry. In addition, the initiative would address:

A. Service to local hospitals, including lectures and surgeries

B. Service to teaching local surgeons, accepting candidates for short term or long-term service

C. Patient Care, patients traveling to the participating hospital (WSRM doctor's hospital) for treatment.

To further this initiative the Ad Hoc Service Committee has been created to look at opportunities for WSRM to engage in clinical/ educational service missions, investigate funding and cost issues to WSRM as well as investigate Medical /Legal issues of service work. If you are interested in serving on this committee and have service work experience please contact Krista Greco at kristagreco@isms.org as soon as possible.

Mark Your Calendar

2017 WSRM World Congress
June 14-17, 2017
Seoul, Korea
www.wsrm2017.com

2019 WSRM World Congress
Summer, 2019
Bologna, Italy

2021 WSRM World Congress
Cancun, Mexico

Global Meetings*

*The posting of these meetings does not define the WSRM as a sponsor or endorser.

American Society for Reconstructive Microsurgery
January 14-17, 2017
Waikoloa, Hawaii, USA
www.microsurg.org

27th Annual EURAPS Meeting
May 25-27, 2017
Pisa, Italy
http://www.euraps.org/meetings/future-meetings/

News from the Executive Council

2015 - 2017 Executive Council

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Embrace the power of our collective community by sharing critical WSRM news, celebrating our individual and collective accomplishments, sharing cases and engaging in didactic discussion, and making decisions together … all in real-time. This kind of visibility to each other and more globally will enhance the WSRM and the value we each derive from it. Visit www.formd.com and start communicating! All WSRM members have free access to the WSRM private network located on for[MD].

News from the Executive Council

2015 - 2017 WSRM Committee Roster

This is official notification to the membership of the members that have been appointed to serve in the standard committees of the WSRM. Please help us applaud those members that have volunteered their time to serve on a committee to better the organization.

Congress Organizing Committee

Myong Chul Park, MD, PhD, Organizing Chairman

Membership Committee

Isao Koshima, MD Chairman (Japan)
Yixin Zhang, MD (China)
Joon Pio Hong, MD (Korea)
Ming-Huei Cheng, MD (Taiwan)
Raja Sabapathy, MD (India)

Nominating Committee

L. Scott Levin, MD, FACS Chairman (USA)
Erkki Tukianen, MD (Finland)
Marko Bumbasirvec, MD (Serbia)
Roman Skoracki, MD (USA)
Jaume Masia, MD (Spain)

Constitution and Bylaws Committee

Milan Stevanovic, MD, Chairman (USA)
Lawrence Gottlieb, MD (USA)
Michel Saint-Cyr, MD (USA)
Samir Kumta, MD (India)
Damien Grinsell, MD (Australia)

Know someone who wants to become a member?

The application process is simple. Applications can be obtained at www.wsrm.net and submitted via email, mail or fax to the Central Office. Applications are accepted and reviewed on a continual basis so we encourage applicants to submit the information as soon as possible to start taking advantage of the membership benefits.

World Society for Reconstructive Microsurgery
Spring-Summer 2016 – Volume 7/ Issue 8

Purpose
The object of the Society shall be to stimulate and advance knowledge of the science and art of Microsurgery and thereby improve and elevate the standards of practice in this field of surgical endeavor. The Society shall be the highest medium of recognition in the field of Microsurgery as evident by superior attainment and by contribution to its advancement. It shall provide an international forum for the exchange of ideas and the dissemination of innovative techniques.

The WSRM Newsletter is published two times yearly for members of WSRM, a non-profit organization. Subscriptions are included in the annual membership dues. All correspondence, address changes, and news for upcoming events should be addressed to:

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