

Tendon Transfer Management of Irreparable Tears of the Rotator Cuff
A Zoom Conference

Prof. Christian Gerber, University Hospital Balgrist, University of Zurich, Switzerland

Dr. Bassem Elhassan, Mayo Clinic, Rochester, Minn, USA

Moderator: Jon J.P. Warner, MD, Boston Shoulder Institute, Harvard University, Boston, MA

(This conference will be recorded for vumedi.com)

Program:

Latissimus dorsi transfer for irreparable posterior-superior rotator cuff tears

(Christian Gerber - 15 min)

Lower Trapezius transfer for irreparable posterior-superior rotator cuff tears

(Bassem Elhassan - 15 min)

Discussion (JP Warner - 15 min)

Pectoralis major transfer for irreparable anterior rotator cuff tear

(Christian Gerber - 10 min)

Latissimus dorsi transfer for irreparable anterior rotator cuff tear

(Bassem Elhassan - 10 min)

Discussion (Jon JP Warner - 10 min)

References for participants:

1. **Gerber C.** Latissimus dorsi transfer for the treatment of irreparable tears of the rotator cuff. *Clinical orthopedics and related research.* 1992(275):152-60.
2. **Gerber C, Vinh TS, Hertel R, Hess CW.** Latissimus dorsi transfer for the treatment of massive tears of the rotator cuff. A preliminary report. *Clinical orthopedics and related research.* 1988(232):51-61.
3. **Gerber C, Rahm SA, Catanzaro S, Farshad M, Moor BK.** Latissimus dorsi tendon transfer for treatment of irreparable posterosuperior rotator cuff tears: long-term results at a minimum follow-up of ten years. *The Journal of bone and joint surgery American volume.* 2013;95(21):1920-6.
4. **Moroder P, Schulz E, Mitterer M, Plachel F, Resch H, Lederer S.** Long-Term Outcome After Pectoralis Major Transfer for Irreparable Anterosuperior Rotator Cuff Tears. *The Journal of bone and joint surgery American volume.* 2017;99(3):239-45.
5. **Ernstbrunner L, Wieser K, Catanzaro S, Agten CA, Fornaciari P, Bauer DE, et al.** Long-Term Outcomes of Pectoralis Major Transfer for the Treatment of Irreparable Subscapularis Tears: Results After a Mean Follow-up of 20 Years. *The Journal of bone and joint surgery American volume.* 2019;101(23):2091-100.
6. **Resch H, Povacz P, Ritter E, Matschi W.** Transfer of the pectoralis major muscle for the treatment of irreparable rupture of the subscapularis tendon. *The Journal of bone and joint surgery American volume.* 2000;82(3):372-82.
7. **Elhassan BT, Wagner ER, Werthel JD.** Outcome of lower trapezius transfer to reconstruct massive irreparable posterior-superior rotator cuff tear. *Journal of shoulder and elbow surgery / American Shoulder and Elbow Surgeons [et al].* 2016;25(8):1346-53.
8. **Elhassan B, Bishop A, Shin A, Spinner R.** Shoulder tendon transfer options for adult patients with brachial plexus injury. *J Hand Surg Am.* 2010;35(7):1211-9.
9. **Elhassan B, Christensen TJ, Wagner ER.** Feasibility of latissimus and teres major transfer to reconstruct irreparable subscapularis tendon tear: an anatomic study. *Journal of shoulder and elbow surgery / American Shoulder and Elbow Surgeons [et al].* 2014;23(4):492-9.

Prof. Christian Gerber

Prof. Gerber was born in Berne, Switzerland and attended the University of Berne (1977) for his Medical Education. His medical school thesis was on the topic of “Total Knee Arthroplasty” (Prof. M.E. Müller was his mentor)

Place of birth: Berne, Switzerland . Prior to and during medical school he Spent significant time in the USA including clerkships with

Dr. Don O’Donoghue (“The Father of Sports Medicine”) in 1974; he also did

medical clerkships at Yale University (Radiology, Internal Medicine, 1977) and Univ. of San Diego (Pathology, 1977). His internship was in Internal Medicine and Neurology in Herzogenbuchsee and Berne, Switzerland (1978). His residency consisted of two years of Traumatology and General Surgery in Davos, Switzerland, followed by three years in Orthopedic Surgery at the University of Berne, Switzerland (Prof. Reinhold Ganz was Chair.) (1983). He then took a variety of international postgraduate fellowships which included Shoulder Surgery at University of Texas, San Antonio (Dr. Charles A. Rockwood, 1984), Tumor Surgery/Foot and Ankle Surgery, at Hôpital Cochin, Paris, France (Prof. B. Tomeno & Prof. M. Kerboull, 1984 - 1985), Pediatric Orthopedics at Hôpital Trousseau, Paris, France (Prof. H. Carliz, September 1985) In 1985 he returned to the University of Berne, Switzerland to become a faculty member (Oberarzt) under Chair of Orthopedics, Professor Reinhold Ganz. In 1988 he became an Assistant Professor and in 1991 he was promoted to Full Professor at the University of Berne. In 1992 he became the Clinical Director and Chair of Orthopedics at Hôpital Cantonal, 1708 Fribourg, Switzerland January 1992 and in 1995 he moved to Zurich Switzerland as Clinical director, Chairman and Professor of Orthopedics at University Hospital Balgrist, Department of Orthopedics. In 2017 he became Emeritus Chair and Senior Consultant at the University of Zürich.

Under his leadership each of his institutions grew in stature as he mentored and guided students who went on to become leaders and Academic Chairs in Orthopedics both in Switzerland and Around the world. He has been President of numerous National and International Organizations (president of SESEC 1995-1998, president of Swiss Society of Orthopedic 2010-2012, founder of the Balgrist Campus AG and RESORTHO foundation) and has lectured all around the world as a distinguished visiting professor. He is most well-known for his innovations and award-winning research. These are too many to list, but several are noted below:



Awards:

- 1990 Charles S. Neer Award of the American Shoulder and Elbow Surgeons (Basic Research Category)
- 1996 Didier Patte Award (European Society for Shoulder and Elbow Surgery)
- 1998 Charles S. Neer Award of the American Shoulder and Elbow Surgeons (Basic Research Category)
- 1998 Charles S. Neer Award of the American Shoulder and Elbow Surgeons (Clinical Research Category)
- 1998 Silver Medal of Merit of the State of Zurich for extraordinary achievements in science.
- 2004 Award for Outstanding Research in Orthopedic Surgery. International Board of Shoulder Surgery
- 2007 Kappa Delta OREF Clinical Research Award
- 2007 Charles N. Neer Award of the American Shoulder and Elbow Surgeons (Basic Research Category)
- 2012 Achievement Award of the American Academy of Orthopedic Surgeons
- 2013 First Charles S. Neer Lecturer of the ICESS, Japan
- 2014 Arthur Steindler Award of the Orthopedic Research Society
- 2014 Honorary Didier Patte Lecturer of SECEC, Istanbul, Turkey
- 2015 Honorary M.E. Müller Lecturer Swiss Society of Orthopedics, Basel, Switzerland
- 2016 Honorary lecturer of the SoFEC, Paris, France
- 2017 Honorary Charles S. Neer Lecturer, American Shoulder and Elbow Surgeons, New Orleans, USA

Publications - link

While he has contributed original work and innovation to virtually all areas of orthopedics (Instability, Arthroplasty, Rotator cuff, Basic Science) he was the first real pioneer in modern application of Tendon Transfers about the shoulder in order to improve function in cases of rotator cuff deficiency and neurological conditions. There is no question that he has one of the most influential orthopedic surgeons of the past century.

Bassem Elhassan, MD

Bassem was born in Tripoli, Lebanon and attended university at American College of Beirut, Lebanon (Chemistry, 1996). He then attended Medical School at American University of Beirut, Lebanon (2000). He Originally started a residency in Thoracic Surgery, but switched to Orthopedic Surgery, completing his first year at The University of Beirut And then moving to University of Illinois at Chicago where he completed His residency (2004). His postgraduate fellowships were in Hand and Upper Extremity at Mayo Clinic (2006) and Shoulder and Elbow at





Boston Shoulder Institute at Harvard, MGH-BWH (2007). He returned to Mayo Clinic in 2010 as a Consultant in Orthopedics Surgery where he has remained as a member of the Hand and Upper Extremity Service and the Shoulder and Elbow Service. He became a Professor of Orthopedics at Mayo Clinic in 2016. He has won numerous awards for his research and in 2015 he was selected as one of two Traveling Fellows representing the ASES to its sister organization, SECEC. He was a founder and director of the Mayo Clinic International Tendon transfer course.

His major contributions has have been to our understanding of the optimal treatment of the dysfunctional shoulder with novel tendon transfers and his work has been bench to bedside with development of procedures which change people’s lives. In fact, he is widely known as the surgeon who fixes the “unfixable”.

[Publications link](#)