



IBRA International Bone
Research Association

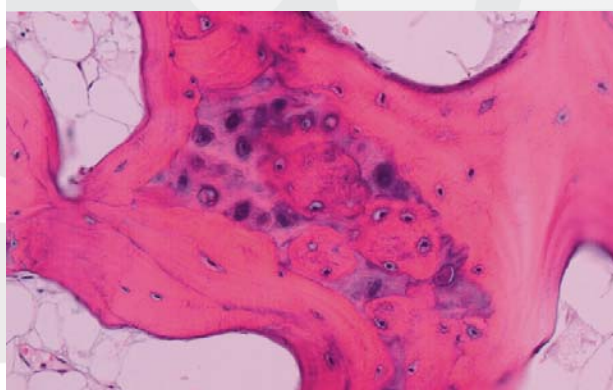
FLASH

01/2012



Content

Foreword	2
Interview with IBRA President Prof. Dr. Hermann Krimmer	2 - 4
IBRA Satellite Symposia 2011	4
Scholarships and Training Centres	5
IBRA Continuous Education	5
IBRA Events	6 - 8
IBRA Research	9
Industrial Partner News	10 - 11



FOREWORD

IBRA looks back at a year full of activities, specially focusing on successively working on the establishment of our structure and strategy. This achievement is attributed to the vital contributions and efforts of our members; their scientific spirit and great expertise have steadily built up our groundwork during the last seven years since the founding of IBRA.

Our activities are recognized in the field of Surgery of the Head and the Upper Limb. This gives us confidence to continuously improving our complementary medical education and - in consideration of own medical and social environments -, to enhance IBRA's platform for the interchange of newest scientific and technical findings.

As in the years before, the most important task of our business and administration office remains to provide the organizational background for the progress of the IBRA.



IBRA Administration Office
José M. Vázquez
Executive Director

INTERVIEW WITH IBRA PRESIDENT PROF. DR. HERMANN KRIMMER



Prof. Dr. Hermann Krimmer
Specialist on Hand and Microsurgery
Associate Professor University of Würzburg

Chief of Handcenter Ravensburg
Krankenhaus St. Elisabeth
Elisabethenstr.19
88212 Ravensburg

Phone: +49 751-872180
e-mail: krimmer@handchirurgie-ravensburg.de
web: www.handchirurgie-ravensburg.de

You are one of the founding members of IBRA and have taken on various duties and responsibilities within the Board of Directors as well as Education and Scientific Committees. From this perspective, what are the strengths of the IBRA?

IBRA is a great platform for surgeons who are devoted to IBRA's segment of interest. It offers specialized activities, but with a general alignment and orientation. Furthermore, IBRA is a unique network for younger surgeons providing them the opportunity to visit other clinics and cultures.

Our members are very active and highly dedicated with profound knowledge and experience in their field of activities.

In addition, the continuous education program is of excellent quality and esteemed not only by its Members, but

also by a vast amount of specialists all over the world.



During the last IBRA General Assembly in May 2011, you were elected the new IBRA-President for a period of three consecutive years. What goals do you want to achieve?

It is of great importance to me to improve the interchange of experiences and to discuss difficult clinical cases. Another objective is to make IBRA more known to Trauma Surgeons. We should also continue to focus strongly on the development and definition of new structures of the conducted activities where reasonable.

There are other important goals such as putting more focus on the international IBRA Network (Members and Training Centers) or to strengthen our activities in the continuous education by intensifying our offer of international and national events.

In order to achieve this, a strong cooperation with national and international associations is indispensable – this can for example be intensified on the occasion of their regular meetings.

What educational and regional strategic plans are you pursuing with IBRA's Continuous Education?

We want to improve the clinical practice, for example by starting specific clinical research projects in collaboration with our Training Centers. We plan to add further competent Training Centers

enabling us to offer even more knowledge on new technologies.

Our main focus of activities is on Europe and the US. Last year, we also set foot in the Latin-American market and we plan to further pursue these activities. We have first contacts and ideas to start activities in the Asian-Pacific region.

The topics we want to focus on in the coming years are based on the "Head Section" e.g. Surgical Approaches, Mandibular Fractures and Orthognathic Surgery. For the "Limbs Section", we will focus on Finger & Hand, Distal Radius, Elbow and in the longer term also on Foot and Shoulder.

What is your understanding of theoretical and practical Training?

Since the foundation of IBRA, we have steadily developed the structure of our events within the Education Committees and the Scientific Committees. The experience that was gained in the Committees together with the consensus made during our events helps continuously developing our own treatment strategies.

This is what we try to share with the plenum – dividing our courses into a more theoretical part and in our hands-on-workshops with focus on vet labs (cadaver workshops) which is similar to live surgery.

Furthermore, the interaction between the participants and the faculty members in both the professional and social environment are important factors. We also should not forget the importance of presenting new technologies and products and the relevant clinical experiences.

And last but not least, integral practical training should also include the fellowship with clinical practice.

The former IBRA-President, Prof. Andrew J. Weiland, underlined the goal of IBRA to offer fellowships to younger dedicated surgeons. Will this direction be maintained?

Our Scholarships represent one of the possibilities to reach younger promising surgeons as well as those who want to complete their curriculum with new treatment aspects.

Since IBRA's foundation in 2004, a significant amount of money was granted to the Scholarship Program and we still believe that this money was well invested in the specific medical education and also for the future of the elaborated segments.

We are currently establishing new guidelines that will help evaluate new applying Training Centers. We are convinced that this will enhance their attractiveness even further. We also believe that this will give us the opportunity to gain further experience with new material and procedures not well known to this date.

Which significance has Research within the activities of the IBRA?

Since IBRA's very beginning, the research committee has received more than 80 highly demanding grant applications.

The major part of the applications concerned mere basic research in fields not meeting our scope. We are looking for new reliable technologies as well as for new medical applications and studies and therefore have to focus on the clinical research and the follow up of difficult and specific surgical procedures.

We thus have to look at both, the basic and the applied clinical research, as an integral part of an interesting project in the field of internal fixation and fracture treatment.

What benefits is IBRA offering to its Members?

We are committed to provide resources and benefits to our Members and interested specialists that support the personal development and network in medical training, education as well as research activities.

The IBRA Membership offers benefits such as simplified access to research grants, prioritized Member scholarship application, considerably reduced course fees for Members or Worldwide Networking to name only a few.

Our Association is a community for surgeons to share their experience and discuss new ideas which might be realized in cooperation with industrial partner Medartis, ensuring a well organized collaboration with excellent engineers and high level technical equipment.

The Center for Hand Surgery in Ravensburg was established by you in January 2005. Since August 2006, it is also an IBRA Training Center. What are the benefits of a stay in your brand new center?

Our Hand Center consists of a team of 5 doctors and one assistant (rotating) from the trauma surgery unit of the St. Elisabeth Hospital which is a major hospital with 620 beds. Thanks to the close collaboration with the St. Elisabeth Hospital, we are able to offer a 24 hour emergency service.



Of the approx. 2500 surgeries that we conduct per year (high number of fractures), 50% are conducted on an ambulatory basis.

The Hand Center is unique since on one hand, it represents the issues of a doctor's office, but offers at the same time all aspects of a modern hospital thanks to the available technologies and surgical equipment. This enables us to take care of our patients adequately and they are looked after from the very beginning up to their full recovery.

Our Center for Hand Surgery offers services covering the whole spectrum of hand surgery and specific areas of surgical and clinical expertise.

To get back to your question, a short-term residency of 1 – 3 months is thus most suitable for a scholar to do clinical training in hand surgery. A scholar will integrate quickly into the rather young team in a comfortable working atmosphere. Also, the large amount of cases we treat every year certainly makes it very interesting for a young surgeon.

We feel that a good team spirit is of utmost importance which is why we also meet on a weekly basis to exchange experiences (e.g. from congresses or surgery cases etc.).

What do you do when you are not working?

Besides spending as much time as possible with my family, I am also a big sports enthusiast.



I used to pursue competitive rowing and this is where the fundamental idea of the Hand Center comes from. As already mentioned, it is of utmost importance to have a good team spirit – a team can only be successful when they row in the same direction and at the same pace. Ravensburg is situated 20 kilometers north of lake Constance and offers vast possibilities to do sports. Biking, hiking, all kinds of water sports in summer and of course skiing in winter are very popular in the area.

I strongly believe that a good surgeon has to be fit both mentally as well as

physically – this allows him to live up to the great efforts when conducting surgery.

This is also why our team regularly combines get-togethers with sports activities such as biking tours or skiing – this has a positive effect not only on the team as such, but on a healthy work-life balance in general.

Thank you, Prof. Krimmer

SATELLITE SYMPOSIA 2011

In collaboration with different national societies, IBRA has organized two very dedicated IBRA Satellite Symposia:



“Mises au point sur le traitement des Fractures de la région condylienne de la mandibule”

Versailles / France

On the occasion of the “47e Congrès de la Société française de Stomatologie et Chirurgie Maxillo-faciale”.



“The most common errors and complications of internal fixation of distal radius” and “Internal fixation of distal radius in elderly patients”

Špindleruv Mlýn / Czech Republic

On the occasion of the 11th Congress of the Czech Society for Surgery of the Hand with International Participation”

Once again, these symposia show us the importance of discussing current topics with the national audience and to bring the outcome into a more international consensus together with the national and international societies.

SCHOLARSHIPS AND TRAINING CENTRES

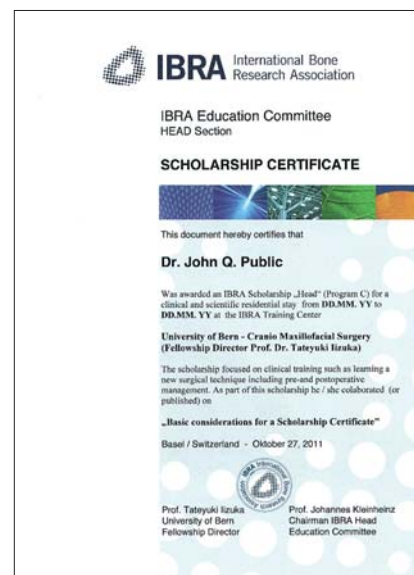
IBRA has a network of a total of 25 IBRA Training Centers located all around the world. They are segmented in „Head“ (11 Centers), „Limbs“ (11 Centers) and „Research“ (3 Centers).

A close collaboration with the Universities, Faculties of CMF and Orthopedics, University Hospitals or Teaching Hospitals is imperative to maintain a high-level training performance and to comply with the latest innovations in internal fixation, surgical techniques, care management and last but not least, be active in clinical research.

The Institution department should be able to host and support a foreign speaking guest during

the period of 1 - 4 weeks for the IBRA Scholarship Program B, or for 1 to 3 months for IBRA Scholarship Program C. This is often an underestimated workload for both, the Training Center and the scholar, especially if specific national and international regulations for visas and working permissions are required.

The ability to communicate in the language of the host-country and/or in English is therefore an important asset for the scholar and certainly helps not only to solve many of the administrative issues with the institution and the public authorities, but is also of help for an easier implementation in work and projects.



New: Scholars receive a customised IBRA Scholarship Certificate with individual information.

IBRA CONTINUOUS EDUCATION

Keeping up with the progresses in medicine and adapting to changes in the delivery of care becomes more and more difficult for a physician. On one hand, it is not easy to maintain the overview with the overflow of different congresses, symposia, courses and workshops and on the other hand, resources are limited.

IBRA seeks to support professional performance by offering very specialized, highstandard courses

that are reflecting the profound experiences and knowledge of our members and dedicated faculties.

An integral part of our course concept is not only to consider outstanding presentations and debates as a base for the exchange of experiences, but also to offer interactive hands-on anatomical workshops and trainings in order to address the latest innovations in surgical management.

Equally, the personal relationship and vivid discussions inside and outside of the plenum play an important role for the organization of our weekend events and satellite symposia.

EVENT HIGHLIGHTS

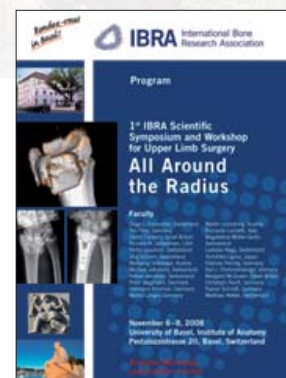
“All Around the Radius - New Developments and Follow-up 2011” in St. Gallen, Switzerland

Back in November 2008, the 1st IBRA Scientific Symposium and Workshop “All Around the Radius” for Upper Limb Surgery took place in Basel with Prof. Jörg Grünert (St. Gallen, Switzerland) as Chairman. Diagnostic and therapeutic possibilities, trends and new technologies were vigorously discussed by the international faculty and very interested participants.

In November 2011, the Chairman invited once again a distinguished international faculty of recognized experts to St. Gallen, Switzerland, in order to look back at the results of the last three years. Also, it was the perfect opportunity to analyze and discuss present achievements related to “All Around the Radius”.

The chosen topics, the expertise as well as the vivid discussions made this event an outstanding one, resulting in a higher level of knowledge and interest for the treatment of distal radius fractures.

The current concept of our events was – from the scientific and social point of view – fully achieved. This was also proven by the comments of the participants and speakers whose connection and interaction is very important and we plan to offer such stimulating environments also for our next courses.



1st Latin American IBRA Seminar and Workshop in São Paulo, Brazil

São Paulo, home to over 17 million people, is not only the largest city in South America, but also Brazil's bustling economic and financial center – and the place where two of IBRA's three Brazilian Training Centers are located. It goes without saying that this was reason enough for us to hold the first Latin American IBRA Event in this unique metropolis.

In August 2011, the 1st Latin American seminar and workshop took place at the Hospital das Clinicas in São Paulo. We are proud that we were able to host the first high-level cadaveric workshop for wrist and hand applications ever organized in Brazil.

The course Chairman was Professor Rames Mattar, head of the Brazilian IBRA Training Center IOT in São Paulo, together with the program Organizers and IBRA Fellowship Directors Dr. Gustavo Mantovani of the São Paulo Hand Center and Dr. Anderson Vieira Monteiro of INTO Hospital in Rio de Janeiro. The very complicated regulatory and ethical requirements that had to be met within the hospital environment were not always easy to fulfill for the Organizers – but they did a fantastic job!

Among other aspects of the event, the seminar participants highly esteemed the professional and highly qualified faculty and their high-level scientific and clinical lectures that were presented in English, Spanish and Portuguese with the corresponding simultaneous translation.

Besides Brazil, countries like Chile, Colombia, Mexico and Argentina were also represented not only with speakers, but a representable amount of participants too.

This event was an ideal platform for the exchange of clinical and scientific philosophies and concepts in wrist and hand surgery.



REVIEW IBRA EVENTS 2011

		Location	Participants	Period Type	Organizational Aspects	Educational Aspects	Total Rating	Overall Rating
Head	International Orthognathic Surgery Forum	Interlaken	69	annual	89%	82%	86%	 100 % 90 % 80 % 70 % 60 % 50 % 40 % 30 % 20 % 10 % 0 % 88,4 %
	German Symposium and Workshop Hand & Limbs	Würzburg	74	annual	84%	81%	83%	
Limbs	Latin American Trauma Course Limbs	São Paulo	109	bi-annual	91%	90%	90%	
	Scientific Symposium All Around the Radius	St. Gallen	119	tri-annual	93%	88%	91%	
	USA Symposium and Workshop Hand and Limbs 2010	Miami	67	annual	94%	89%	92%	

Just visit our Member Area as a "visitor" (counts also as password) and have a more detailed view!

IBRA EVENTS 2012



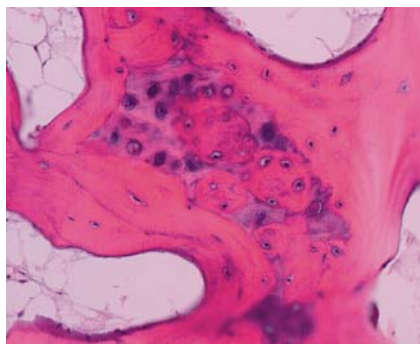
The **5th International Orthognathic Surgery Forum** took place in Interlaken / Switzerland, in February 2012. Similar to the past conferences, also this year's forum concept has proven to be of valuable consideration focusing on new exciting topics and current techniques that were vividly discussed from the surgical and orthodontical points of view.

During 5 consecutive years with the scientific supervision of Prof. J. Kleinheinz from Münster / Germany, the "International Orthognathic Surgery Forum" has offered a consolidated platform for unique topics and important questions and facts. These events have been attended by nearly 360 specialists from all over the world. We are proud to feature today a valuable and loyal community.

In order not to overload the subject, however, we have decided that this interdisciplinary course will be offered in the future on a biannual basis. This will also allow us considering other attractive locations in Europe to conduct the course.



IBRA RESEARCH PROGRAM NEWS



During the last few years, we have repeatedly received dozens of grant applications that represented the full spectrum of fundamental and applied Research. Few of them were within the focus of IBRA, but an important part was out of our scientific focus and resources.

Additionally, we underestimated the substantial extent of limitation within our own Research Grant Application Program, especially with our RCL (Research Proposal for Clinical or Laboratory Research) and RPP (Research Program Project), leaving only room for the so-called SGA's (Small Grant Application).

Therefore, the IBRA Board of Directors has decided on a "Research Program Hiatus" starting January 1st, 2012, for an indefinite period of time.

This means that our Research Grant Program is currently not assigned and a new possible deadline for applications will be communicated when applicable.

IN COMMEMORATION OF PROF. DR. ROBERT K. SCHENK *1923 - †2011

Prof. Dr. Robert. K. Schenk passed away on September 20th, 2011.

During his professional career of more than 50 years, Prof. Schenk was a unique contributor to the field of internal fixation, presenting to the medical and scientific community new arguments and basic groundwork that were simultaneously innovative and constitutional.



With an exemplary dedication and a unique creative power in the segment of Bone Biology and Fracture Healing, Prof. Schenk marked important scientific steps during decades. His rhetoric talent and his extraordinary didactic ability were important attributes that accompanied him during his impressive lifework. The impressive scientific activity, always driven by his opinion that "research should only be done with good friends", has historically contributed to the current view of bone and bone regeneration.

The International Bone Research Association is proud to honor him in memory and to continue offering two of the most prestigious prizes in the segment - the annually awarded "Robert Schenk Research Prizes".

IBRA SCIENTIFIC SEMINAR

The Scientific Seminar was originally intended as a combined "Head" and "Limbs" Forum, not only to combine the two different segments of our Association, but also to offer a platform of contact and science for all our Members. Most of the attendees of former Scientific Seminars will certainly affirm how interesting the combined topics were and along this event, we also organized our annual General Assembly successfully.

However, we were repeatedly obliged to cancel our IBRA Scientific Seminars because of the poor attendance to this event. This was also the reason why the intended Scientific Seminar that was scheduled for May 2011 had to be cancelled. Analyzing this situation and considering not only the big efforts that were always put into the success of this event, it was decided to stop this meeting for the coming years.

APTUS Wrist – Arthrodesis System

Analgesia, mobility and stability are basic requirements for the intact function of the hand. It is a huge limitation in quality of life for the affected person if the „normal function“ of the hand is absent. To allow a painfree everyday life with the biggest possible freedom of movement, a partial or total arthrodesis is very often performed as last solution.

Development

The development of the osteosynthesis with plates and screws revolutionized the wrist arthrodesis and nearly completely eliminated the problem concerning the long duration of immobilization. Anyhow, many authors still report on high complication rates in arthrodesis of the wrist^{1,2,3,4,5,6,7}. Inter alia they describe high rates of pseudoarthrosis, problems concerning the soft tissue, persisting pain, fractures at the distal end of the plate after total arthrodesis and the necessity of post surgical metal removal. The aim of the development of the APTUS arthrodesis plates was to minimize or even eliminate the complications described in literature. Another main goal was to be the first provider to offer the surgeon a complete set which covers all requirements in the field of wrist arthrodesis, based on the proven screw concept of the APTUS family. The following arthrodesis plates were developed together with designated international hand-, orthopaedic- and trauma surgeons and rheumatologists:

Arthrodesis plates 2.0/2.3

Partial mediocarpal arthrodesis (4CF, STT):



For this purpose, we can offer special plates in two sizes for the Four Corner fusion (4CF) as well as one plate for the fusion of the scaphoid, trapezium and trapezoid (STT). The plates have two screw rows. The lower plate hole row serves to support the compression of the carpal bones intended to be fused with cortical screws (optional for small 4CF and STT). In the top plate hole row an angle-stable fixation can be achieved by using TriLock screws.

Thereby a very stable construct between the carpal bones intended to be fused and the plate is created. Thus, the risk concerning pseudoarthrosis can be clearly minimized. Because of the concave shape of the reamer and the plate, the bone amount needed to be chipped can be reduced. The simple handling without intraoperative tilting of the plate allows a time-saving and secure treatment.

Arthrodesis plates 2.5

Partial radiocarpal arthrodesis (RSL plates):



For the fusion of the radius, the scaphoid and the lunate (RSL fusion), we can offer each a left or right anatomically formed arthrodesis plate. Due to the low profile height of the plate, the well rounded chamfered edges and the highly polished surface the irritation of the soft tissue can be reduced to a minimum. The RSL-fusion facilitates pain reduction in post traumatic or post traumatic radiocarpal arthritis whilst a precious remaining mobility can be preserved.

Total Wrist Fusion (TWF plates):



The total wrist arthrodesis is indicated when the carpal destruction has

reached a stage when joint-preserving measures are not possible anymore. For this indication we can offer two anatomically bent plates. A plate with long bend is intended for patients with medium to large wrists. For patients with small wrists or with previous proximal row carpectomy, the plate with short bend can be used alternatively. The new plate design enables a wrist arthrodesis without fusing the metacarpal joint at the same time. Thus, a healthy joint can be protected and the physiological range of motion of this joint can be maintained. If the conditions severely differ from the normal anatomy, which can often be seen in rheumatic patients, a straight plate which includes the metacarpal joint can be used. As a further special feature, the total arthrodesis plates have pre-angled screw holes. These holes are placed and oriented in a manner that a bone graft inserted between the carpal bones and the radius can be fixated. The arthrodesis plates 2.5 are compatible with the APTUS Radius 2.5 system and the arthrodesis plates 2.0/2.3 are compatible with the APTUS Hand 2.0/2.3 system.

1 Meier, R.; Prommersberger, K.-J. and Krimmer, H. Teil-Arthrodesen von Scaphoid, Trapezium und Trapezoideum (STT-Fusion) [Scapho-Trapezio-Trapezoid Arthrodesis] Handchir Mikrochir Plast Chir 2003; 35: 323-327

2 Tay, S. C.; Moran, S. L.; Shin, A. Y. and Linscheid, R. L. The Clinical Implications of Scaphotrapezium-Trapezoid Arthritis With Associated Carpal Instability J Hand Surg 2007; 32A: 47-54

3 Vance, M. C.; Hernandez, J. D.; DiDonna, M. L. and Stern, P. J. Complications and Outcome of Four-Corner Arthrodesis: Circular Plate Fixation Versus Traditional Techniques J Hand Surg 2005; 30A: 1122-1127

4 Shindle, M. K.; Burton, K. J.; Weiland, A. J.; Domb, B. G. and Wolfe, S. W. Complications of circular plate fixation for four-corner arthrodesis Journal of Hand Surgery (European Volume, 2007) 32E: 1: 50-53

5 Mühldorfer, M.; Hohendorff, B.; Prommersberger, K.-J. and van Schoonhoven, J. Mittelfristige Ergebnisse nach radioscapholunärer Fusion zur Behandlung der posttraumatischen Radiokarpalarthrose [Medium-term Results after Radioscapholunate Fusion for Post-traumatic Osteoarthritis of the Wrist] Handchir Mikrochir Plast Chir 2009; 41: 148-155

6 Zachary, S. V. and Stern, P. J. Complications Following AO/ASIF Wrist Arthrodesis J Hand Surg 1995; 20A: 339-344
Hastings II, H.; Weiss, A.-P.; Quenzer, D.; Wiedeman, G. P.; Hanington, K. R. and Strickland, J. W. Arthrodesis of the Wrist for Post-Traumatic Disorders J Bone Joint Surg Am. 1996; 78: 897-902

7 Nagy, L. and Büchler U. AO-Wrist Arthrodesis: With and Without Arthrodesis of the Third Carpometacarpal Joint J Hand Surg 2002; 27A: 940-947

For more information, please contact Daniel Kainz, Product Manager Wrist at daniel.kainz@medartis.com.

MODUS Orthognathics

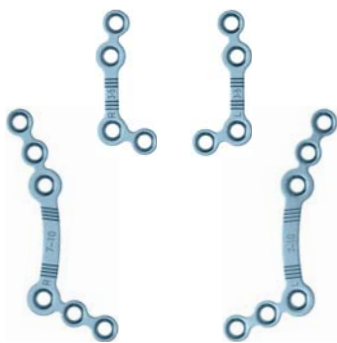
Skeletal malpositioning of midface and/or mandible results in malocclusion. Concerned patients are unable to chew “normally”, as the position and the relation of the dental arches are incorrect. Besides functional constraints, also aesthetic aspects become increasingly important in today's society. These two factors play an essential role in the decision making process of getting an elective orthognathic surgery. Typically, orthognathic surgery is done in young adults between 18 and 25 years of age.

Development

Despite certain basic principles in orthognathic surgery, there are different ways on how maxillary and mandibular advancements and setbacks can be performed. Especially for corrections in the mandible, the chosen approach depends on the individual treatment philosophy of the respective surgeon. It was Medartis' goal to provide a variety of indication specific fixation possibilities for different osteotomy lines and fixation concepts. Anatomical plate shapes requiring minimal bending are key features of the new portfolio.

The new MODUS Orthognathics portfolio was developed in close cooperation with notable clinics following different approaches in orthognathic surgery:

LeFort Osteotomies



- 1.5 L- and Z-plates for nasal and lateral osteosynthesis
- Plate design based on clinical CT-data of 50 patients
- Minimal intraoperative bending

Sagittal Splits



- Open plate design for fixation with transversal elasticity
- Treatment concept with rigid IMF
- Plate's arms can be placed around nervus mentalis

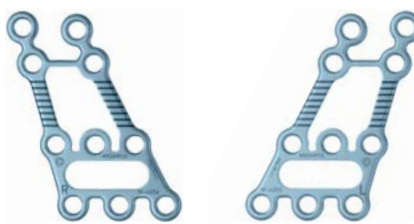


- Closed plate design for semi-rigid fixation after sagittal split
- No rigid IMF needed
- Anatomical plate design allows to position the plate just below the exit of the nervus mentalis



Mandibular setback (closed plate design) and maxillary advancement by Tim Lloyd, University College London Hospital

Ramus osteotomies



- For mandibular corrections performed by ramus osteotomies
- Distance of the split along the nerve is reduced to a minimum
- Advantage: Reduced risk of nerve injury

- Less bone overlap requires stable fixation
- Ramus plates feature increased stability with the possibility to use TriLock screws
- Fixateur intern for osteosynthesis on the ascending ramus



Mandibular advancement (ramus plates) by Dr. Lars Bonitz, University Hospital Dortmund

During Limited Release, various hospitals throughout Europe have collected experience with the new plate designs. Excellent results have been achieved! The participants of this year's IBRA Symposium in Interlaken had the possibility to interact with design surgeons and to gain hands-on experience working with the new MODUS Orthognathics plates during a workshop.



Tim Lloyd, chairman of the workshop session, giving instructions to participants

For more information, please contact Sarah Furrer, Product Manager at sarah.furrer@medartis.com



IBRA International Bone
Research Association

IBRA
International Bone Research Association

Hochbergerstrasse 60E
CH-4057 Basel
Phone +41 61 319 05 05
Fax +41 61 319 05 19
info@ibra.ch
www.ibra.ch