COA 2012 Beijing Summit

The Chinese Orthopaedic Association (COA) is a leading orthopedic organization representing and serving over 100,000 orthopedic surgeons in over 7,700 orthopedic hospitals in China. In its annual conference in 2011, COA invited over 80 leading global societies and 100 medical devices manufactures in a joint Beijing Declaration. The COA 2011 Beijing Declaration advocated a global strategy to unite the efforts and expertise of musculoskeletal experts across the globe. The goal is to face the challenges of an aging population and the increasing threat of musculoskeletal conditions through CARE:

Cooperation - initiate a platform to enhance global and national collaboration and partnership among the professions, industries and related patient organizations and disciplines

Advocacy - appeal to the government to increase health funding, to utilize evidence to decrease medical cost and to improve medical insurance coverage in society

Research - emphasize translational and interdisciplinary research with clinical application

Education - maximize the global network of web-based learning and encourage

COA hopes to continue with this momentum and is working with a task group consisting of international experts from both the professional and industry groups to launch the World Orthopaedic Alliance (WOA).

WOA will be a non-profit association dedicated to the advancement of musculoskeletal care in developing countries.

The 2012 Beijing Summit is the premier event to inaugurate WOA. Through close cooperation with partner organizations, WOA hopes to build a neutral platform where orthopedic surgeons and medical devices companies, global or regional, could communicate and collaborate to unite efforts to improve musculoskeletal care in developing countries and healthcare systems.

WOA is guided by a Steering Committee which will consist of individuals responsible for general operating policy, procedures, and related matters affecting the WOA as a whole. Members of the steering committee come from leading experts from industry and academia. The general coordination of WOA activities will be provided by the Steering Committee and its designated committees.
The rapid growing of Orthopaedic nursing career

Following the rapid development of orthopaedics, the nursing talents team of orthopaedic department is growing, and the training program of Orthopaedic Clinical Nurse Specialist is building up gradually. The nursing care in orthopaedic has made a great change from the classic nursing pattern which depended on the experience, took cared limited in the diseases, and focused on the nursing knowledges and techniques, to a whole new pattern which is characterized by the holistic nursing, the evidence-based nursing and the specific nursing closely connected with orthopedic surgeries and rehabilitation. The Nursing Group also made great achievements. The former chief Wu Xinjia of Peking Union Medical College Hospital, Professor Guo Xuanwen, the Director of Nursing at Beijing Jishuitan Hospital, became the vice chairman of Chinese Nursing Association. Li Huaing, the Director of Nursing of First Affiliated Hospital, Sichuan University, actively involved the training program of orthopedic clinical nurse specialist. Yang Xia, the head nurse of Peking Union Medical College Hospital, was the first to establish the Specification of Thromboprophylaxis. During the Chinese Nursing Association Orthopaedic Nursing Congress, committee members fully expressed their academic opinions, and made a strong reception. Overall, in the last year Orthopaedic Nursing did make huge progress, and will go forward in the future.

Since Professor Wang Yan, the President of Orthopaedic Hospital of PLA General Hospital and the Chairman of The Chinese Medical Association Orthopaedic Society, has been the chairman of COA, he put a high value on developing the nursing group, as he will attend the establishment ceremony of nursing committee of the Seventh International Congress of COA, and awarded the appointment letters to the new committee managers. The election of the committee based on academic and regional reason. Though the strong cooperation of the committee, it is expected to make orthopaedic nursing career grow in balance and comprehensively.

In year 2012, because of the cooperation between the Nursing Group and the entire colleague of orthopaedic nursing, the academic communication of orthopaedic nursing in COA become thriving. The number of contributions increases from about 1000 in last year to over 2000, especially the research article and the contribution abroad increase obviously. To improve the quality of the manuscript and communication, we detail refereeing procedure by classifying the article into different diseases to make the refereeing work easier. After the fairly and strictly building relationship with lots of international academic organization. The internationalization degree of COA 2012 specialties, but has been more detail. The new added subjects include high quality nursing, nursing management, and Extremities Fractures session 2 (Upper extremities fractures), Osteoarthrosis and Spinal Fusion (PVP, PKP), the Treatment of Orthopaedic Vertebral Fracture , the Treatment of Orthopaedic Arthropathy, Minimally Invasive Treatment of Osteoporosis and Comprehensive Treatment of Osteoporosis.

Osteoporosis conference has three plenary speakers, 94 liberal speakers and 222 papers submitted. Papers submitted cover a broad spectrum of topics such as epidemiology of osteoporosis, pathogenesis, drug treatment and clinical research, the prevention and treatment of osteoporotic fractures, the principles of operative treatment, new techniques and treatment progress of fractures and research progress of osteoporosis. The conference also provided opportunities for the international authors to share experience and knowledge and a case discussion. Four experts from Germany and the United States have been invited. All participants will learn the English language and enjoy academic exchanges with the international experts.

The Beng of an enhancing flower: The rapid growing of Orthopaedic nursing career.

Bo QU
Chinese Orthopaedic Nursing Society

COA 2012-Osteoporosis Meeting

In the 17th international congress of Chinese Orthopaedic Association (COA), Osteoporosis study group set up a special meeting with the support of the Orthopaedic Association (The current president is Prof. Wang Yan from Beijing 301 Hospital) - the meeting includes nine different topics, Basic Research of Osteoporosis, Clinical Foundation of Osteoporosis, Osteoporosis and Extremities Fractures session 1 (Hip fracture), Osteoporosis and Extremities Fractures session 2 (Upper extremities fractures). Osteoarthrosis and Spinal Fusion (PVP, PKP), the Treatment of Orthopaedic Vertebral Fracture , the Treatment of Orthopaedic Arthropathy, Minimally Invasive Treatment of Osteoporosis and Comprehensive Treatment of Osteoporosis.

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COA 2012-Osteoporosis Meeting

Chinese experts' consensus of the diagnosis and treatment osteonecrosis of the femoral head in adult

Introduction
Osteonecrosis or avascular necrosis of the femoral head, a recurrent and common disease characterized by death of the osteocytes and the bone marrow, is caused by inadequate blood supply to the affected segment of the subchondral bone. Experts’ suggestions that the staging and biomarker detection of osteonecrosis of the femoral head was described for diagnosis, treatment and evaluate operation effect of ONFH in 2006. The Chinese Medical Association, the Chinese Orthopaedic Association, the Group of Microsurgery, and Chinese Association of Reparative and Reconstractive Surgery, the Group of Bone defect and Osteonecrosis, and the editorial board of Chinese Orthopaedic Nursing Association set up the congress on ONFH to update the experts’ suggestions in March, 2012. Almost all members of the Microsurgery groups and senior experts were invited to discuss the concepts. Finally, expert’s consensus was given to provide a basis for diagnosis, treatment and evaluate operation effect of ONFH.

Overview
Association Research Circulation Osteoporosis (ARCO) and American Academy of Orthopedic Surgeons (AAOS). Osteonecrosis of the femoral head is not a specific diagnostic entity, but this disorder is considered a final common pathway for many diseases that lead to altered blood supply to the femoral head and cell death within the femoral head. Historically, ONFH is characterized by dead osteocytes, necrotic marrow elements, and lack of vascularity in a defined region in the femoral head, in most cases, these changes lead to subsequent collapse of the subchondral bone and the development of the hip joint.

The etiology of osteonecrosis of ONFH includes traumatic and nontraumatic causes. ONFH commonly occurs after direct trauma, such as hip dislocation or femoral neck fracture. Pathogenesis of nontraumatic ONFH is not well understood, and often one or more risk factors are involved, such as corticosteroid use, alcoholism, degeneration sickness and sickle cell anemia in China.

Diagnostic criteria
The diagnostic criteria was decided by reference to Japanese Investigational Committee (JIC) and Mont's criteria. Clinical symptoms, sign and medical histories, X-rays, CT scan, Magnetic Resonance Imaging; Radiolucent bone scan; Bone histologic examination.

Exempt consensus: With any combination of two or more of these criteria, the case can be diagnosed ONFH. Except the 1st and 5th criteria, any other one criterion can diagnose ONFH.

Differential Diagnosis
Differential diagnosis because analogous clinical symptoms and imaging osteonecrosis of the femoral head. Idi-late term osteoarthrosis, Acetabular Dysplasia secondary Osteonecrosis. Arisingly spirovitis involving the hip, Rhoematous arthritis, Chondroliomatis in femoral head; Osteorrotic dysplaia in femoral head; Idiopathic transient Osteoporosis of the hip(TOH);Pigmented Villonodular Synovitis(PVNS)disfigure of bone.

Staging
A number of classification systems for ONFH have been developed, including the ARCO (Association Research Circulation Osteoporosis), Stulberg10 and Ficat11. The special suggested these classification systems of ARCO is considered most useful. ONFH was described as early stage(ARCO 0 stage – 1 stage),middle stage(ARCO I stage – II stage) and latter stage (ARCO II – III stage) .

Management alternatives for ONFH vary from joint salvaging procedures including Non-operative treatment and operative treatment. Factors affecting the out come of these procedures include patient’s age, etiology and stage of osteonecrosis, and size the location of the osteonecrosis lesion.

Non-operative Treatment
Non surgical management as partial weight bearing can only be selected for early stages and very small lesions. Weight-bearing. Treatment of drug; Chinese traditional treatment; Physiotherapy; Immobilization and Traccion; Use in the early stage(ARCO 0 stage – 1 stage) and the middle stage (ARCO II – III stage) of ONFH.

Operative Treatment
Because the effect of non-operative treatment was performing poorly, most patients of ONFH have to choose operative treatment. Management alternatives for ONFH vary from joint salvaging procedures including core decompression, non-vascularized bone-grafting, Osteotomy, vascularized bone-grafting and joint arthroplasty.

The most commonly used procedures are core decomposition and vascularized bone-grafting in early(ARCO 0 stage – 1 stage) and middle stages(ARCO I stage – II stage).Core Decompression; Non-vascularized bone-grafting, Osteotomy, Vascularized bone-grafting, Joint arthroplasty.

Vascularized bone-grafting. The rationale for vascularized bone-grafting is that it allows decompression, provides structural support, and restores a vascular supply that had been deficient or nonexistent for a long period of time. There have been multiple published reports on the use of vascularized around hip and fibular grafts. Presently, there are seven distinct approaches for around hip bone graft: (1) iliac graft vascularizations, (2)vascularized greater trochanter graft , (3) greater trochanter flap with branch of transverse lateral circumflex femoral vascular ; (4)vascularized pedicled hip bone flap of deep iliac circumvallate vascular; (5) greater trochanter flap with branch of transverse lateral circumflex femoral vascular and iliac graft vascularizations, (6) iliac graft with deep branch of medial circumflex femoral artery or pedicled ilium perineal flap. (7) quadratus femoris muscle pedicle. The expert advice was given to use around vascularized hip bone graft, because of its small wound, good curative effect, technical characteristics and surgeons’ proficiency choose using graft. Choose the treatment methods

Stages and Treatment
ARCO 0 stage , core decompression (with implants included bone marrow stromal cells) ARCO I stage, core decompression (with implants included bone marrow stromal cells), vascularized bone-grafting, non-vascularized bone-grafting(15%< necrosis volume <30%)

Middle stage: core decompression, vascularized bone-grafting, non-vascularized bone-grafting and joint arthroplasty.

Age and Treatment
Young adults: core decompression (with implants included bone marrow stromal cells), vascularized bone-grafting, non-vascularized bone-grafting(15%< necrosis volume <30%)

Middle-aged : core decompression, vascularized bone-grafting, non-vascularized bone-grafting and joint arthroplasty.

Dewei ZHAO
Chinese Orthopaedic Microsurgery Society

China Osteoporosis Society
Introduction to Orthopedic Rehabilitation branch

There is a gap between the development of our orthopedic rehabilitation and the developed countries such as Europe and the United States, in terms of the rehabilitation philosophy, professional and technical level, the modernization of equipment and the popularity of the rehabilitation in public.

COA International Academic Conference Orthopedic Rehabilitation Venue can not only establish a professional communication platform for our orthopedics and rehabilitation workers, to enhance the importance of rehabilitation, but also strengthen the rehabilitation workers orthopedic knowledge, thereby promoting the orthopedic rehabilitation development. Therefore, undoubtedly orthopedic rehabilitation is an indispensable part of China's orthopedics.

Since, the majority of orthopedic and rehabilitation workers are having a good response to the first orthopedic rehabilitation sub-forum in the last COA conference, the current orthopedic rehabilitation sub-forum still receives much concern. Comparing to the last sub-forum, this forum has a higher quality in exchange and more detailed and extensive in related orthopedic rehabilitation knowledge.

The sub-forum of orthopedic rehabilitation mainly focuses on the rehabilitation and treatment of the spine and spinal cord diseases, joint rehabilitation and complex amputation rehabilitation etc. We also invited Prof. Jianjun Li from China Rehabilitation Research Center, Prof. Qingben Chen from the Hong Kong Prince of Wales Hospital, Prof. Karsten Dreinhöfer from Germany to share their professional knowledge and research results in the field of orthopedic rehabilitation. At the same time, the orthopedic rehabilitation sub-forum will focus on domestic and international communication, and exchange among hospitals, orthopedic and rehabilitation workers; thus, this forum will establish a high-level academic exchange platform in orthopedic rehabilitation.

Moreover, this sub-forum of orthopedic rehabilitation highlights spinal cord rehabilitation and treatment, which shows new advances in orthopedic rehabilitation, and presents hot topics of basic medical and academic research. We believe that this meeting as a new milestone can further promote China's orthopedic rehabilitation.
1. What is the mission and objective of WOA?

In addition to the existing mission it should be more emphasis on the future collaboration with the industry to produce affordable instrument and implant for the third world country. There are great demands for simple power tool and simplify instrument for trauma care in those countries. Unfortunately this goal is not the prime interest for most of the medical device company which need to be discussed in further details.

2. How the organization may impact to the world of Orthopedics?

The optimized evolution of Orthopaedic in all countries suffers from deficits in data, describing our daily work. A clear picture of our work with all different Orthopaedic community with their organizations in countries or continents, needs the involvement at the end of all being interested or in duty for the exiting project as Politicians and Government, financiers of the health-system and of course industry, being in close contact to see with research and development each day.

It is my belief, that there is not one country that could not benefit from such cooperation and the results. At the end a successful work will lead to harmonization of Orthopaedic and related Traumatology.

3. What are your personal involvement and contribution to WOA?

I have accepted to give advice to COA on the WOA initiative being part of a steering committee. The COA meeting has grown rapidly over the last decade attracting Chinese orthopedic surgeons but also recently become an important global melting point between physcians from the developing societies and the more mature societies like AAOS,BOA,JOA,SCOT etc.

The possibilities and advantages of collaboration beyond borders in education, safety issues, to improve standard of care are obvious. The use of modern browsing technology and webcasting makes it easier to learn from each other in the future also between meetings. The language barrier will continue to disappear.

The technical revolution and demand in orthopedics needs to be mastered with evidence on efficacy, stepwise introduction, skill transfer, quality control and not only market driven for us to minimize backlash.

4. What is your expectation to WOA?

I hope World Orthopaedic Alliance (WOA) is an international non-profit association dedicated to the advancement of high quality musculoskeletal care in indicated cases.

I think this message has to be widened to all countries - of course the needs for education are on different levels in different places.

We will hopefully be able to create a network of cooperation and will have a collection of data describing the needs and guidelines for education. This is the way to increase patient care and decrease costs. Precise indication for diagnostic and treatment and optimized education and training will lead to better outcomes.

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**Interview of President Elect of AO Foundation**

1. What is the mission and objective of WOA?

Looking to the quality of health-systems in different countries, because of different reasons there is no possibility to be relaxed especially because of big differences in patient care.

As Orthopaedic surgeon we know that in the current individual burden of acute and chronic disease and of course with view to financial burden to the public, musculoskeletal conditions and musculoskeletal trauma represent a big part of all patients globally – and this is increased by biological factors of the aging population.

We Orthopaedic surgeons from all over the world do see the different problems in patient-care and so we see the need to change something and this is now identified as “ready and necessary for change”.

From the many factors influencing patient-care we will focus to the central point of education of Orthopaedic surgeons and doing so, we know that this is the central way also to look for appropriate cost-effective solutions.

With the possibility to meet each other in all our different countries to discuss our daily work and exchange experiences and research, we realize how difficult, time-consuming and expensive we all are acting –if separated.

We come to the vision, to use the benefits of global close cooperation.

In this situation we have to take action to network and bring all together globally who feels motivated to work with the same intention – to increase patient care by increasing education of Orthopaedic surgeons globally.

I am happy and thankful, that COA took action with great power, demonstrated before in the fast evolution of the Congresses of COA and the Beijing Declaration.

The work now starting with WOA needs global networking and the involvement of the whole Orthopaedic community with their organizations in countries or continents, needs the involvement at the end of all being interested or in duty for the exiting project as Politicians and Government, financiers of the health-system and of course industry, being in close contact to see with research and development each day.

It is my belief, that there is not one country that could not benefit from such cooperation and the results.

At the end a successful work will lead to harmonization of Orthopaedic and related Traumatology.

Thinking about this we immediately know that we will be guided on one hand by ethical rules - extremely difficult if we do not have a regional but global discussion.

On the other hand necessarily we will be guided and sometimes limited by financial (economic) discussions as economic interest drives and so promotes the evolution but otherwise also limits possibilities principally existing.

Following the mission to work for better and harmonized education of Orthopaedic Surgeons - today we have the big help of high-tech-systems for communication and so to be used for education.

Internet based education will be necessary for sure as the big amounts of information can be transported to all of us in time by normal lecturing during congresses or symposia or in daily clinical training.

In addition it is to be foreseen, that economic crisis in different parts of the world might be a possibility for travelling to teaching-events in other areas or countries.

2. How the organization may impact to the world of Orthopedics?

The optimized evolution of Orthopaedic in all countries suffers from deficits in data, describing our daily work.

A clear picture of our work with all different

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**Interview of Founding Chair, Bone and Joint Decade (BJD)**

1. What is the mission and objective of WOA?

I think that both the short mission and objective are appropriate and focusing on an unmet need that we are not able to better handle in collaborative efforts.

2. How the organization may impact to the world of Orthopedics?

The COA meeting has grown rapidly over the last decade attracting Chinese orthopedic surgeons but also recently become an important global melting point between physicians from the developing societies and the more mature societies like AAOS,BOA,JOA,SCOT etc. The possibilities and advantages of collaboration beyond borders in education, safety issues, to improve standard of care are obvious. The use of modern browsing technology and webcasting makes it easier to learn from each other in the future also between meetings. The language barrier will continue to disappear.

The technical revolution and demand in orthopedics needs to be mastered with evidence on efficacy, stepwise introduction, skill transfer, quality control and not only market driven for us to minimize backlash.

COA should try to act as a responsible role model for the developing countries.

3. What are your personal involvement and contribution to WOA?

I expect WOA to start with a few areas, which I have been involved in education for more than 30 years in A.O. I strongly believe that good education in any field of Orthopaedic will reduce complication to our patients.

4. What is your expectation to WOA?

I hope WOA will be successful also between societies with a different view, but keeping in mind not to lose the patient focus.