

出國報告（出國類別：參加會議）

國際髖關節會議
(International Hip Society, 2018)

服務機關：骨科部/院本部

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派赴國家：瑞典

出國期間：2018年6月25日至7月3日

摘要

國際髖關節學會(International Hip Society, IHS)為全球髖關節領域的菁英學會，學會成員總數一直控制在 200 人以內，含 80 位左右的積極成員(active member)，要求具備足夠的學術造詣、經過學會投票嚴選，才得以成為會員，如能成為會員更是執業生涯的莫大殊榮。本人榮幸由 2008 起被推薦為台灣唯一代表，此次在瑞典的年會會議當中與八十幾位世界級大師相互切磋與學習，其中許多大師都是骨科教科書的編撰者。在此會議上本人發表了一篇口頭論文，分享髖關節原發惡性骨癌以自體骨重建的特殊處理經驗，獲得熱烈討論。大會主席美國哈佛大學教授 Henrik Malchau 評為此會議 The most inspiring and best presentation. 希望可以借由此一機會，讓世界各國的專家知道台灣在髖關節及骨腫瘤治療領域之進步，也可宣揚台北榮民總醫院的醫療成就。

關鍵字：IHS，Total hip arthroplasty，Malignant bone tumor

一、目的

為增加在髖關節疾病研究領域上的新知，與各國學者交流，並提讓各國專家知道台灣最近幾年在此領域的傑出表現和進步，提高團隊在國際間的知名度。此次的交流活動探討了各種髖關節困難手術及髖關節疾病治療之規範、趨勢及新的治療方式。與會之專家討論不但熱烈而及非常深入及廣泛，藉由此會議，彼此互相交流學習，深感獲益良多，是會員每年期待參與的小而美會議。

二、過程

6/25 晚上搭乘飛機前往荷蘭，再由阿姆斯特丹轉機至瑞典斯德哥摩爾，抵達時間已是 6 月 26 日中午。

6/27 搭火車至瑞典第二大城哥德堡，也是本次會議的舉辦地點。

6/28 上午參與會議並參加各國代表的跨國研究討論會、餐會，下午參觀世界知名的哥德堡大學。

6/29 全天參加會議及討論，下午發表演講，題目為：

Recycled autograft reconstruction for primary malignant bone tumor of the hip，總共報告 67 例。我們團隊將病患罹患骨癌之骨盆切下後，予以高劑量放射線照射或液態低溫冷凍處理後再植回體內。手術相當困難，手術時間長、出血量高，但經過平均 98 個月的追蹤，

高達 72% 的病患仍無病存活，日前累積病例數及存活率均位居世界第一。

演講反應熱烈，許多大師發言提問及給我們高度讚賞和肯定，瑞典哥德堡大學教授甚至直接邀請我日後至該校演講及示範手術。

6/30 上午參加會議，主題主要討論髌白截骨手術治療，會中有幾項新的手術方法，值得學習及引進台灣。

7/1 於哥德堡當地旅遊及參觀美術館。

7/2 搭飛機經阿姆斯特丹轉機返台。

三、心得

1. 經過兩天半的會議及討論，可以更了解目前全球髌關節重建手術之發展趨勢與最新進展。

2. 和各國大師的交流和連絡感情，除了讓他們更了解台灣於髌關節領域之發展，也可增進國際情誼，方便日後年輕一代醫師出國進修或交流。

3. 舉辦此次會議的哥德堡市，是瑞典第二大城，適逢世足賽舉辦期間，瑞典國家隊踢進前八強，舉國歡騰，可以感受到瑞典人對足球的狂熱及人民團結一心的氛圍。真希望台灣有朝一日也能在全球關注的體育活動有優異比賽，凝聚全國人民的向心力。

4. 會後到了幾家超市購物買民生用品，發現多數已完全仰賴條碼結帳，並無櫃台人員在場，對工資調漲，施行一例一休的台灣，勢必是未來趨勢，值得大量引進，亦可用於醫療產業。此外，玻璃或塑膠空瓶大多有回收及退費，完全仰賴機器處理(附圖三)，機器設立於超市門口，對環保及資源回收大有助益。

四、建議事項

1. 會議之安排及軟硬體設備相當完善有效率，令人耳目一新，可供我們辦國際大會之參考。

2. 本院惡性骨腫瘤治療成果全球知名，臨床及基礎研究均有相當不錯的成果。人工髌關節置換一年超過一千例，手術及治療成果也不遜於全世界最知名之醫學中心，但是人工關節基礎研究宜再更深入加強，目前發表之論文較欠缺基礎研究之高影響力的文章。

3. 本院無專門之醫工及材料研究人才，和陽明大學醫工所或其他學術單位加強合作，將臨床發現由基礎研究來印證，相輔相成方能持續鞏固北榮髌關節治療領域在台灣之領導地位，會請骨科部關

節重建科更加努力，朝此方向前進。

附錄

Scientific Program
International Hip Society, closed meeting,
Gothenburg, Sweden June 27-30, 2018
Venue: Elite Park Avenue Hotel, Banquet Hall 2, floor 1

Thursday June 28, 2018

08.00 – 08.15 Henrik Malchau: Welcome to Gothenburg

08.15 – 10.00 Session I: Primary Hip I – 7 presentations – 9 mins + 6 mins discussion
Moderator: Dan Berry

08.15 – 08.30 Changes in Spino-pelvic mobility after total hip replacement
Andrew Shimmin

08.30 – 08.45 Hip or spine surgery first? A survey of treatment order by members of the North American Hip Society
Stuart B. Goodman, Ning Liu, Paul F. Lachiewicz, Kirkham B. Wood

08.45 – 09.00 Is a modular dual mobility acetabulum a viable option for the young, active total hip arthroplasty patient?
Robert L. Barrack, Denis Nam, Rondek Salih, Cindy R. Nahhas, Ryan M. Nunley

09.00 – 09.15 Early clinical results of an anatomic cementless ceramic hip resurfacing arthroplasty
Justin Peter Cobb, Susannah Clarke, Camilla Halewood, Rob Wozencroft, Jonathan Jeffers, Kartik Logishetty, Brogan Keane, Hardeep Johal

09.15 – 09.30 Improved accuracy in restoration of native hip biomechanics in robotic-arm assisted surgery compared to conventional manual techniques for total hip arthroplasty: A prospective cohort study.
Babar Kayani, Sujith Konan, Sumon Huq, Fares Haddad

09.30 – 09.45 Complications and obesity in arthroplasty - A hip is not a knee
John J. Callaghan, David E. DeMilk, Nicholas A. Bedard, S. Blake Dowdle, Jacob Elkins, Timothy S. Brown, Yubo Gao

09.45 – 10.00 Dilute betadine lavage reduces the risk of acute postoperative infection in aseptic revision total knee or hip arthroplasty: Interim analysis of a randomized controlled trial
Tyler E. Calkins, Chris Culvern, Denis Nam, Tad Gerlinger, Brett Levine, Scott Sporer, Craig J. Della Valle

10.00 – 10.30 Break

10.30 – 12.30 Session II: Primary Hip II – 8 presentations – 9 mins + 6 mins discussion
Moderator: Fares Haddad

10.30 – 10.45 The SPAIRE technique (Spare Piriformis and Internus, Repair Externus) for hip arthroplasty is safe and effective
John Timperley

- 10.45 – 11.00 All success of bone cement are stiffened bone structures - a histo-pathological analysis of successfully functioned cemented stems up to 26 years after implantation
Ch P Draenert, **John Older**, K Draenert
- 11.00 – 11.15 Can acetabular bone stock be improved by using less stiff acetabular components?
Gary Hooper, Nigel Gilchrist, Rod Maxwell, Chris Frampton
- 11.15 – 11.30 Hip capsular function after arthroplasty
Sara K. Muirhead-Allwood, K. Logishetty, R.J. van Arkel, G.K.C. Ng, J.P. Cobb, J. Jeffers
- 11.30 – 11.45 Objective measures of activity and sleep after primary THA. How much do they improve in the first 6 months after surgery?
L. Bogdan Solomon, J. Bahl, J. Arnold, K. Curness, F. Fraysse, D.W. Howie, D. Thewlis
- 11.45 – 12.00 Oxford Hip Scores at 10 years are (Still !) associated with total hip revision within the subsequent 2 years
Peter Devane
- 12.00 – 12.15 Is there any clinical importance of separation congenitally dislocated hip into types C1 and C2 by G. Hartofilakidis?
Rashid Tikhilov
- 12.15 – 12.30 40 years with the Swedish Hip Arthroplasty Register
Ola Rolfson, Maziar Mohaddes, Cecilia Rogmark, Johan Kärrholm, Henrik Malchau
- 12.30 – 13.30 – Lunch**
- 13.30 – 15.00 – Business meeting**

Friday June 29, 2018

08.00 – 10.15 Session III: Revision Hip I – 9 presentations – 9 mins + 6 mins discussion
Moderator: Henrik Malchau

- 08.00 – 08.15 90-day costs, re-operations, and re-admissions for primary total hip arthroplasty patients of varying BMI levels
Richard W. McCalden, K. Ponnusamy, J.D. Marsh, L.E. Somerville, S.J. MacDonald, D.D. Naudie, B.A. Lanting, J.L. Howard, E.M. Vasarhelyi
- 08.15 – 08.30 The feasibility of outpatient revision total hip arthroplasty in selected patients
Adolph V. Lombardi, Jr., K.R. Berend, M.J. Morris, D.A. Crawford, J.B. Adams
- 08.30 – 08.45 Two - year experience of a 'Hub and Spoke' revision arthroplasty network: 1,000 cases and counting
Ben Bloch, Laura Mends, Peter James, **Andrew Manktelow**
- 08.45 – 09.00 Fixed prostheses can be loose. High hydroxy-appetite loosening rates in the collarless Corail un-cemented stem
Dick R. van der Jagt, A. Brekon, L. Mokete, J. Pietrzak, M. Nortje, A. Schepers
- 09.00 – 09.15 Acetabular reconstruction with porous metal augments for primary and revision THA
Hirotosugu Ohashi, Hirolake Yo, Tesshu Ikawa, Yoshito Minami, Takanori Teraoka
- 09.15 – 09.30 Inferior extended fixation using porous metal augments in acetabular reconstruction during revision total hip arthroplasty
Yixin Zhou
- 09.30 – 09.45 Histological evaluation of the quality of acetabular bone tissue in revision surgery
Alessandro Massè, A. Bistolfi, A. Alinari, E. Cravero
- 09.45 – 10.00 Uncemented highly porous tantalum acetabular components: What is the risk of failure 10 years after revision THA?
PL Sousa, MP Abdel, EL Francois, AD Hanssen, **David G Lewallen**
- 10.00 – 10.15 Extended trochanteric osteotomy (ETO) in revision total hip arthroplasty: contemporary outcomes of 612 cases
Matthew P. Abdel, Anthony Viste, Kevin I. Perry, Arlen D. Hansen, Robert T. Trousdale, **Daniel J. Berry**

10.15 – 10.45 Break

10.45 – 12.45 Session IV: Infection – 8 presentations – 9 mins + 6 mins discussion
Moderator: Ian Stockley

- 10.45 – 11.00 Different bearings on each side have different incidence of infection in patients with bilateral THA
Philippe Hernigou, Arnaud Dubory, Charles Henri Flouzat Lachaniette
- 11.00 – 11.15 Is ceramic related to a lower bacterial adhesion than other biomaterials in vitro?
M.A. Buttaro, P.A. Stulilil, M.L. Sánchez, G. Greco, S. McLoughlin, C. García-Avila, F. Comba, G. Zanotti, **Francisco Piccaluga**

- 11.15 – 11.30 Can leukocyte esterase replace frozen section in the intraoperative diagnosis of periprosthetic hip infections?
Luigi Zagra, Francesca Villa, Laura Cappelletti, Enrico Gallazzi, Giovanni Materazzi, Elena De Vecchi
- 11.30 – 11.45 Outcome of DAIR procedures in the Swedish Hip Arthroplasty Register 1999 – 2016
Johan Kärrholm, Karin Svensson, Maziar Mohaddes, Ola Rolfson
- 11.45 – 12.00 Joint aspiration, including culture of reaspirated saline after dry tap is a valuable diagnostic tool in the diagnosis and characterization of hip and knee prosthetic joint infection
Ian Stockley, D Partridge, R Cooper, R Townsend
- 12.00 – 12.15 Do post-debridement cultures taken in cases of prosthetic joint infection reflect procedural success?
Steven J. MacDonald, Mehul Garach, Brent Lanting, Richard McCalden, Edward Vasarhelyi, Douglas Naudie, James Howard
- 12.15 – 12.30 Can we establish a global database for study of infection after THA? A proposal for the database structure and governance
Henrik Malchau, Karin Svensson, Maziar Mohaddes, Ola Rolfson, Stephen Graves, Johan Kärrholm
- 12.30 – 12.45 Single-stage revision with selective direct intra-articular antibiotic infusion for chronic infected total hip arthroplasty: an average of 4.5 years of follow-up – Chinese experience
Cao Li
- 12.45 – 13.45 – Lunch**
- 13.45 – 15.30 Session V: Bearing Surfaces – 7 presentations – 9 mins + 6 mins discussion**
Moderator: Andrew Shimmin
- 13.45 – 14.00 A prospective randomized trial comparing alumina ceramic on-ceramic with ceramic on conventional polyethylene: 15 year follow-up
James P. Waddell, A. Atrey, J. Wolfstadt, A. Khoshbin, S. Ward
- 14.00 – 14.15 Highly crosslinked polyethylene in total hip arthroplasty – results after 8 to 16 years
A Cheung, CH Yan, PK Chan, H Fu, S Cheung, (Peter) KY Chiu
- 14.15 – 14.30 Polyethylene wear of a porous-coated acetabular cup. A 18- to 23- year prospective follow-up study
E Garcia-Rey, E Garcia-Cimbrelo, José Cordero-Ampuero
- 14.30 – 14.45 Lower friction and wear of highly cross-linked poly with phospholipid polymer surface treatments in ceramic on polyethylene total hip replacements: In vitro testing
Kevin L. Garvin, J.N. Weisenburger, M. Kyomoto, R.L. Siskey, S.M. Kurtz, H. Haider
- 14.45 – 15.00 Evaluation of *in vivo* wear of vitamin E stabilized highly cross-linked polyethylene at five years: A multicenter, RSA Study
Orhun Muratoglu, Vincent Galea, James Connelly, Bitu Shareghi, Johan Kärrholm, Olof Sköldenberg, Mats Salemyr, Mogens B Laursen, Charles Bragdon, Henrik Malchau
- 15.00 – 15.15 Osteolysis after primary THA using first-generation XLPE: analysis using 3-dimensional CT scan at follow-up of fifteen years
Seung-Hoon Baek, Jong-Min Lee, Yeon Soo Lee, Shin-Yoon Kim
- 15.15 – 15.30 Cost reduction for the THA community worldwide produced by XLPE
William Harris
- 15.30 – 16.00 Break**
- 16.00 – 17.00 Session VI: Miscellaneous – 4 presentations – 9 mins + 6 mins discussion**
Moderator: John Timperley
- 16.00 – 16.15 A retrieval analysis of oxinium heads: Do oxinium heads decrease tribocorrosion in total hip arthroplasty?
Mathias Bostrom
- 16.15 – 16.30 Recycled autograft reconstruction for primary malignant bone tumor around the hip
Wei-Ming Chen
- 16.30 – 16.45 The direct anterior approach for treatment of periprosthetic fractures of the femur
Martin Krismar
- 16.45 – 17.00 Swedish Orthopaedics in the 21st century – How can we use national databases?
Erik Malchau, Ola Rolfson, Peter Grant, Jonas Thanner, Magnus Karlsson, Maziar Mohaddes

Saturday June 30, 2018

**08.30 – 10.00 Session VII: Non Arthroplasty I – 6 presentations – 9 mins + 6 mins discussion
Moderator: David Lewallen**

- 08.30 – 08.45 Borderline acetabular dysplasia: Independent predictors of hip instability versus impingement
Jeffrey J. Nepple, Elizabeth A. Graesser, Joel E. Wells, **John C. Clohisy**
- 08.45 – 09.00 Tissue properties of delaminated cartilage flaps in FAI patients and their potential for refixation
Clara Levingson, Florian Naal, Gian Salzmann, Marcy Zenobi-Wong, **Michael Leunig**
- 09.00 – 09.15 High survivorship and little osteoarthritis at longterm followup in severe SCFE patients treated with a modified Dunn procedure
Klaus A. Siebenrock
- 09.15 – 09.30 Rotational acetabular osteotomy for symptomatic hip dysplasia in patients younger than 21 years
Yuji Yasunaga, Ryuji Tanaka, Takuma Yamasaki, Takashi Syouji, Nobuo Adachi
- 09.30 – 09.45 The capsular arthroplasty for young patients with unilateral hip dislocation
Hong Zhang
- 09.45 – 10.00 Achieving a zero percent transfusion rate in periacetabular osteotomy (PAO)
Richard F. Santore, Michael P. Muldoon, Austin A. Long, G. Max Gosey, Robert Healey

10.00 – 10.30 Break

**10.30 – 11.15 Session VIII: Non Arthroplasty II – 3 presentations – 9 mins + 6 m discussion
Moderator: John Callaghan**

- 10.30 – 10.45 Does the hip-shelf procedure modify the function and survival of primary hip arthroplasty? A case-control study comparing outcomes of arthroplasty after hip-shelf to those of arthroplasty in dysplastic hips at a minimum 10-years' follow-up
Henri Migaud, K. Bénad, S. Putman, C. Delay, J. Girard, G. Pasquier
- 10.45 – 11.00 Genome-wide association study of osteonecrosis of the femoral head
Takuaki Yamamoto, Yuma Sakamoto, Yasuharu Nakashima, Shiro Ikegawa
- 11.00 – 11.15 Modified femoral neck osteotomy through surgical hip dislocation for osteonecrosis of femoral head: Preliminary results
Xiaodong Chen, Chao Shen, Junfeng Zhu, Jianping Peng, Yimin Cui

11.15 Close of meeting

Recycled autograft reconstruction for primary malignant bone tumor around the hip

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The purpose of this study was to evaluate the functional and oncological outcome of recycled autograft reconstruction after a wide excision for primary malignant bone tumor around the hip.

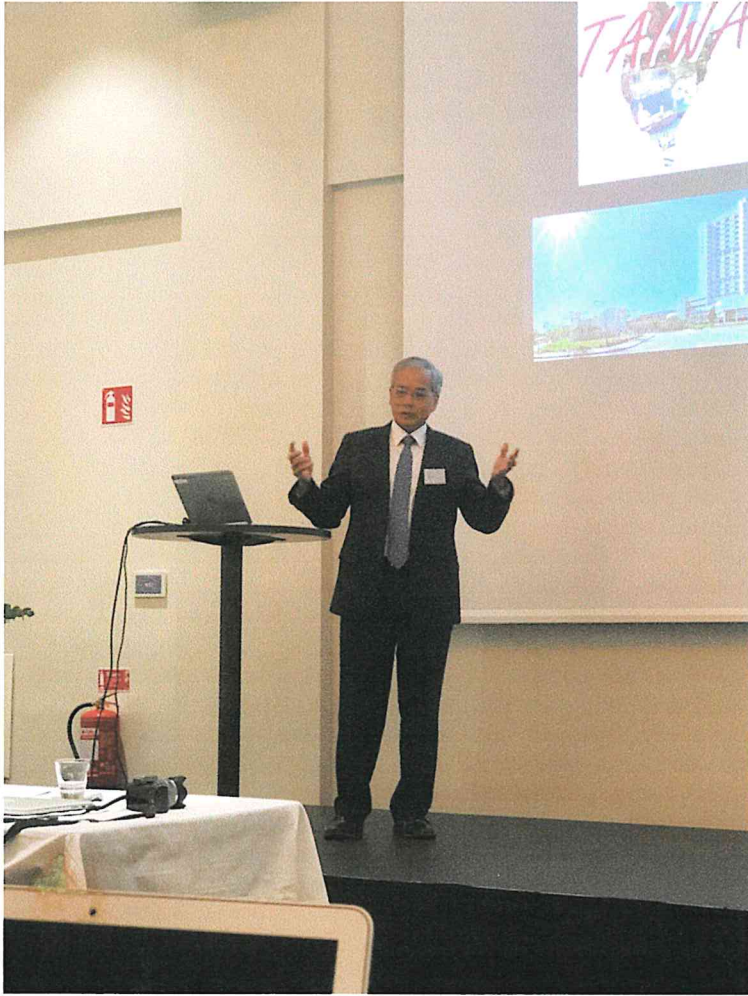
From 1998 to 2015, 67 patients with a primary malignant bone tumor involving proximal femur or periacetabular zone (P2) were included. There were 36 males and 31 females with a mean age of 34 years (13 to 58). Of these, 29 patients had grade I or II chondrosarcoma, 28 high-grade osteosarcoma, 6 Ewing's sarcoma and 4 undifferentiated pleomorphic sarcoma. Enneking stage of all 67 patients was stage II. Of the resection classification, proximal femur resection was performed in 29 patients, P1+P2 in 15, P2+P3 in 14, P1+P2+P3 in 4, P2 only in 4, and P2+proximal femur in 1. Extracorporeally irradiated recycled autograft and liquid nitrogen frozen autograft were performed in 44 and 23 patients, respectively.

At a mean follow-up of 98 months (10 to 239), 48 patients (72%) were continuously disease-free, 12 (18%) died of disease and 7 (10%) were alive with disease. The tumors of these patients who had died of disease were usually located in pelvic bones (10/12). Of these 37 patients with pelvic tumors, 7 patients (22%) had local recurrence, four of them received external hemipelvectomy. Other complications included hip dislocation in 2 patients, nerve injury in 2 and deep infection in 2. However, the above complications were rarely occurred in the patients with proximal femur reconstruction. The mean Musculoskeletal Tumor Society functional score were 77% (53 to 93).

Recycled autograft reconstruction for primary malignant bone tumor around the hip is a valid method with acceptable morbidity and a favorable functional outcome.

Notes





圖二



圖三