

出國報告（出國類別：國際會議）

2018 年第五屆世界骨科大會會議

服務機關：臺中榮民總醫院

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派赴國家地點：義大利米蘭

出國期間：107 年 7 月 23 日至 107 年 7 月 29 日

報告日期：107 年 10 月 12 日

摘要 (含關鍵字)

Percutaneous Endoscopic Lumbar Discectomy Strategy for L5-S1 Disc Herniation Based on Image Analysis: A Review of 301 Cases

【Background】

To provide timely and accurate medical analysis, surgical strategy, safety and clinical outcome for full endoscopic discectomy for L5-S1 under intravenous sedation and to recognize the prevalence of anatomical anomaly on lumbosacral segments from our case series.

【Methods】

From October 2004 to July 2017, 301 cases of disc herniations at the L5-S1 level were treated using full endoscopic discectomy through the interlaminar or transforaminal approach by a single neurosurgeon. We retrospectively evaluated the clinical data, including preoperative and postoperative visual analog scale (VAS) scores for low back pain and leg pain, shoulder or axilla approach, lumbosacral bony anomaly, ruptured disc, calcified disc, recurrent disc herniation management and long-term outcome.

【Results】

All operations were performed under IV sedation while all of the patients were kept conscious. None of them were converted to other surgical techniques. The prevalence of disc herniation was 62% (187/301) over left side and 38% (114/301) over right side. The prevalence of lumbar sacralization and sacral lumbarization were 4.6% (14/301) and 5.6% (17/301). The prevalence of ruptured and severe calcified disc was 17.9% (54/301) and 3.0% (9/301). The prevalence of pediatric disc herniation was 1% (3/301). Postoperative VAS scores of all patients were significantly improved compared to preoperative status. Seven cases of recurrent disc herniation at the same site were treated with repeated endoscopic surgery and five cases of recurrent disc herniation at the same site were treated with major operation. No failed surgery or complication was recognized.

【Conclusions】

Percutaneous endoscopic lumbar discectomy (PELD) under IV sedation has advantages in enhancing safety and reducing surgical complications. Lumbosacral transitional vertebrae (LSTV) should be recognized preoperatively to avoid incorrect level surgery. L5-S1 endoscopic discectomy using the interlaminar or transforaminal approach is safe and excellent clinical outcome with minimal invasive treatment.

Key Words: ruptured disc, calcified disc, recurrent disc, pediatric disc herniation, PELD, LSTV

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一、目的

自 2001 起，本院引進第一代腰椎內視鏡手術系統，並於 2006 年引進第二代腰椎內視鏡手術系統，報告人至今已經累積超過 700 餘例腰椎內視鏡案例，亦發表多篇 SCI 期刊提升科研能量。此次第五屆世界骨科大會主動邀請本人對脊柱微創手術領域發表演講並擔任座長主持會議，引導脊柱微創醫師與學者會議激盪發引。在此感謝醫院准予公假，使此次出席得以順利成行。

二、過程

大會組委會第五屆年度骨科世界大會 2018 (WCORT-2018) 於 2018 年 7 月 25 日至 27 日在意大利米蘭舉行。WCORT-2018 是一個獨特的平台，匯集了國內外公認的骨科、脊椎科、科學家、公共衛生專業人員、行業研究人員、學者領域的專家，以交流最先進的研究和技術。它的目的是激發治療的新思路，這將有益於骨科及其疾病。進入第五個年頭，WCORT-2018 將首次從中國搬到歐洲，通過宏偉的科學和社會計劃進行擴展，全體講座，平行研討會，口頭交流和活潑的海報會議為推進，執行和交流有關骨科及其相關領域的信息提供了專門的論壇，最大化參會者在現代和開放環境中的研究和網絡。



本人此次受邀演講題目「Percutaneous Endoscopic Lumbar Discectomy Strategy for L5-S1 Disc Herniation Based on Image Analysis: A Review of 301 Cases」為議題進行專題演講。

會議進行期間區分為不同主題進行熱烈討論與交換意見，每天早上和下午都各有五場平行的口頭報告議程讓與會者自由選擇參加自己感興趣的主題。報告人進行演講與擔任座長時段如下：

Forum 1-5: Minimally Invasive Spine Surgery	
Time: 13:30-17:10, July 27, 2018 (Friday)	
Place: DoubleTree by Hilton Hotel Milan , Italy	
Chair	<i>Dr. Hsi-Kai Tsou</i> , Chief of the Functional Neurosurgery Division, Neurological Institute, Taichung Veterans General Hospital, Taiwan
Co-chair	<i>Call for Co-chair</i>
13:30-13:35	Chair's Introduction
13:35-14:00	<i>Title:TBD</i> <i>Dr. John Shepperd</i> , Consultant Orthopaedic Spinal Surgeon, East Sussex Hospitals NHS Trust, UK
14:00-14:25	<i>Title: Percutaneous Endoscopic Lumbar Discectomy Strategy for L5-S1 Disc Herniation Based on Image Analysis: a Review of 301 Cases</i> <i>Dr. Hsi-Kai Tsou</i> , Chief of the Functional Neurosurgery Division, Neurological Institute, Taichung Veterans General Hospital, Taiwan



大會議程中，眾多場次的講演不乏值得學習之主題。然因平行議程之故，只能做出取捨選擇出席感到興趣的場次。

三、心得

經過數天緊湊與精采的專題演講與眾多廠商展示觀摩之後，對於世界各地專家學者致力於骨科與脊柱微創技術與植入材發展和展望紛紛提出精闢建議，感到自我學習成長的必要性。對於醫院能夠准予公假協助本人學習吸收最新資訊，相信在往後的臨床與學術應用上，必能夠更加精進。

四、建議事項(包括改進作法)

感謝單位長官支持，核准報告人公假出國參與會議，期望單位長官持續培養後進，為中榮培養更多傑出人才。

附錄

出國人員鄒錫凱科主任受 2018 年第五屆世界骨科大會會議邀請，以 Taichung Veterans General Hospital, Taiwan 代表身分進行演講：Percutaneous Endoscopic Lumbar Discectomy Strategy for L5-S1 Disc Herniation Based on Image Analysis: a Review of 301 Cases，會後並與參會人員進行交流。

