

出國報告（出國類別：開會）

The 54th Annual Meeting of the Japanese
Society for Spine Surgery and Related
Research -2025 JSSR 會議

服務機關：國立成功大學醫學院附設醫院

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派赴國家：日本

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摘要

本報告記錄參與日本脊椎外科學會第 54 屆年會並發表演講之經驗與收穫。會議期間以「GUARD Technique and Delayed Ligamentum Flavectomy: Reducing Neurological Complications in Uniportal Full-Endoscopic TLIF」為題進行專題演講，分享 GUARD 技術與延遲黃韌帶切除術在單孔全內視鏡經椎間孔腰椎椎間融合術中的創新應用。GUARD 技術結合延遲黃韌帶切除術為一項創新的神經保護策略，能顯著降低術後神經併發症的發生率，包括因術中神經牽扯導致之神經疼痛和神經功能障礙。此技術易於學習且能有效整合至現有手術流程中，無需額外成本，對提升患者安全具有重要價值。透過與國際專家的交流與討論，不僅分享了臨床研究成果，也獲得了寶貴的學術回饋，對於未來在微創脊椎手術領域的發展具有重要意義。

關鍵字：GUARD 技術、延遲黃韌帶切除術、單孔全內視鏡脊椎手術

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目的

參與日本脊椎外科學會第 54 屆年會並發表演講的主要目的包括：

一、分享 GUARD 技術與延遲黃韌帶切除術在單孔全內視鏡經椎間孔腰椎椎間融合術中的創新應用成果:單孔全內視鏡 TLIF 手術相較於傳統開放性手術，雖然具有微創手術的優勢，但術後神經併發症發生率仍有改善空間，特別是因術中神經牽扯導致之神經根發炎和硬膜囊撕裂等問題。本研究分析了接受單孔全內視鏡 TLIF 手術患者的臨床資料，發現我們創新的 GUARD 技術結合延遲黃韌帶切除術，能顯著降低術後神經併發症的發生率，具有顯著的臨床價值。

二、與國際脊椎外科專家進行深度學術交流，分享臨床經驗並獲得專業回饋。日本脊椎外科學會成立於 1972 年，現有會員超過 5000 名，其中包括來自韓國、台灣、新加坡等地的海外會員約 800 名，作為亞洲地區最具影響力的脊椎外科學術組織，該學會不僅匯聚了眾多頂尖專家，更是推動亞洲脊椎醫學發展的重要平台，透過參與此次會議與發表演講，與來自不同文化背景的專家交流手術技巧與臨床心得。

三、推廣新技術的臨床應用價值，探討其在不同醫療環境中的適用性與推廣策略。GUARD 技術的核心優勢在於其不需要額外的特殊器械或設備投資，僅需調整手術流程即可實現，這使其特別適合在資源有限的醫療環境中推廣。此外，透過標準化的訓練流程，預期可在 3-6 個月內讓有經驗的脊椎外科醫師掌握此技術，大幅降低學習成本。

四、希望能建立國際合作研究網絡，推動多中心臨床試驗的進行。期待有機會與日本、韓國及東南亞地區的醫療機構建立合作關係，進行更大規模的前瞻性研究，以進一步驗證 GUARD 技術的長期效果與安全性。

過程

會議於 2025 年 4 月 17 日至 19 日在日本千葉幕張展覽館舉行，為期三天的學術盛會吸引了約 3000 名來自世界各地的脊椎外科專家參與。

第一天參與了開幕式及主題演講，同時進行演講前的最後準備工作。於第一天下午進行了專題演講「GUARD Technique and Delayed Ligamentum Flavectomy: Reducing Neurological Complications in Uniportal Full-Endoscopic TLIF」。演講內容包括：GUARD 技術的理論基礎與發展歷程、延遲黃韌帶切除術的手術流程改良、臨床案例分析與併發症比較研究、以及技術應用的經濟效益評估。演講後的問答環節獲得了熱烈迴響，與會專家就技術細節、適應症選擇、學習曲線等問題進行了深入討論。會議期間亦參與了其他領域的論文發表會議與專題討論，與來自不同國家的專家就微創脊椎手術的未來發展方向進行了廣泛交流。透過與同行的深度對話，不僅分享了研究心得，也獲得了寶貴的臨床經驗與改進建議。



▲此次上台發表之研究論文

心得

透過參與本次會議並發表演講，深刻體會到學術交流與知識分享的重要價值。能夠在國際頂尖的脊椎外科學術平台上發表研究成果，不僅是對過去臨床工作與研究努力的肯定，更是推動醫學技術進步的重要責任。

以下是幾個這次印象深刻的外賓演講：

1. 內視鏡技術發展方面，泰國的 Wongthawat Liawrungrueang 教授分享了「微創脊椎手術精要及內視鏡脊椎手術進展」，展現了從傳統開放手術到全內視鏡技術的演進。現代內視鏡手術已能處理從簡單椎間盤突出到複雜脊椎狹窄的多種病變，大大縮短了恢復時間。
2. 胸腰椎骨折的微創處理，馬來西亞的 Chee-Kidd Chiu 教授探討「胸腰椎骨折復位固定的微創手術策略」展示了經皮椎弓根螺釘固定術和導航輔助精準置釘技術的最新發展。
3. 嚴重脊椎側彎治療方面，馬來西亞的 Mun-Keong Kwan 教授(也是現任亞太脊椎外科醫學會主席)針對「嚴重特發性脊椎側彎(≥ 90 度)的手術處理」，提出了針對大角度側彎的創新手術策略，包括分期手術和新型矯正技術。
4. 動態矢狀面失衡處理由韓國 Yong-Chan Kim 教授分享「嚴重動態矢狀面失衡的手術策略決策」涵蓋入路選擇、手術順序和截骨術技術的最新進展。
5. 新加坡 Dennis Hey 教授提出的「360度動態保存技術在退化性脊椎疾病的應用」代表了脊椎手術理念的重大轉變，從傳統的融合手術轉向維持脊椎運動功能的保存性治療。

這些新知識對臨床實務具有重要意義，不僅提高了手術安全性和有效性，也為患者提供了更好的治療選擇和預後結果。會議展現的技術整合趨勢，特別是人工智慧、個體化醫療和跨學科協作的發展，預示著脊椎外科未來的發展方向。

在自己的演講過程中與國際專家的互動交流令人印象深刻。來自不同國家的同行對 GUARD 技術表現出高度興趣，特別是在降低神經併發症方面的顯著效果。多位專家詢問了技術的學習曲線、適應症選擇標準，以及在不同人群中的應用經驗，這些問題的討論進一步深化了對技術本質的理解。此項技術的核心價值在於其實用性與普適性。GUARD 技術結合延遲黃韌帶切除術不需要昂貴的特殊設備或複雜的學習過程，卻能顯著提升手術安全性。這種"簡而有效"的特點使其具備了廣泛推廣的潛力，特別是在資源

相對有限的醫療環境中。演講後收到的正面回饋與後續合作邀請，更加堅定了繼續深化這項技術研究與推廣的決心。

會議期間的學術交流也讓我深刻認識到持續創新與國際合作的重要性。醫學技術的發展需要跨越地域界限的知識共享與協作，只有透過這樣的平台，才能真正推動整個領域的進步，最終造福更多的患者。



▲一同與會的台灣脊椎外科專家醫師



◀與國外專家醫師合影其一



◀與國外專家醫師合影其二



◀與國外專家醫師合影其三

建議事項

基於本次會議的學習成果與觀察，提出以下建議：

- **設備與資源配置評估**

雖然 GUARD 技術不需要特殊設備，但仍需評估現有內視鏡設備的適用性，確保能夠支援新技術的實施。同時建議建立相關的品質監控機制，確保技術應用的安全性與有效性。

- **臨床研究與數據收集**

建議建立標準化的臨床數據收集系統，追蹤新技術應用的效果與安全性。這不僅有助於技術的持續改進，也能為未來的學術發表提供有力的數據支持。

- **跨科協作機制建立**

微創脊椎手術涉及多個專科的協作，建議建立跨科團隊合作機制，包括麻醉科、放射科、復健科等，確保患者能夠獲得全方位的醫療照護。

- **持續教育與學術交流**

建議定期派遣醫療人員參與國際學術會議，保持與國際先進技術的接軌。同時可考慮舉辦相關的學術研討會，促進區域內的技術交流與經驗分享。

- **患者教育與溝通**

新技術的引進需要患者的理解與配合，建議制定相應的患者教育材料，提升患者對新技術的認知與接受度，從而提高治療效果與滿意度。

附錄

The 54th Annual Meeting of the Japanese Society for Spine Surgery and Related Research The First Day-April 17 (Thursday)

English Session Wordy Live Translation & Captioned

Venue	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00
Room 1 Convention Hall A (2F)		7:30-8:30 Business Meeting	8:40-10:10 Symposium 1 Spinal Surgery T. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita		11:00-11:30 Educational Lecture 1 Treatment for non-traumatic thoracic M. Akagi		12:15-13:15 Luncheon Seminar 1 T. Kubota	13:15-14:00 Congress President's Lecture M. Teraoka	14:00-15:00 Cultural Lecture I. Harata	15:15-16:30 Special Lecture K. Yamada, A. Ohtsuka	16:45-17:45 JSJR Related Academic Awards T. Furukawa, A. Yamada, T. Takahashi, K. Yamashita, T. Takahashi, N. Yamashita	17:45-18:45 Debate 1 Spinal Surgery K. Yamashita, K. Yamashita, K. Yamashita	
Room 2 Convention Hall B (2F)		8:30-9:45 Opening Ceremony	8:40-9:45 Educational Lecture 2 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	9:45-10:30 Debate 2 Spinal Cord Injury T. Takahashi, H. Matsui, T. Takahashi	11:00-12:05 Main Theme 1 Research and management in spinal cord injury T. Takahashi	12:15-13:15 Luncheon Seminar 2 M. Sekoi, T. Ogata				15:15-16:15 Luncheon Seminar 1 K. Yamada, R. Ogawa	16:45-18:15 Symposium 2 Spinal Cord Injury S. Hara, T. Takahashi, K. Yamashita, T. Fujimori, K. Tama		
Room 3 International Conference Room (2F)			8:40-9:45 Main Theme 2 Current status of spinal cord injury treatment T. Takahashi	9:45-10:30 Main Theme 3 Spinal cord injury T. Takahashi	11:00-12:05 Main Theme 4 Spinal cord injury T. Takahashi	12:15-13:15 Luncheon Seminar 3 K. Yamashita, H. Matsui				15:15-16:15 Luncheon Seminar 2 R. Mizumoto, M. Neo	16:45-17:45 Educational Lecture 3 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	17:45-18:30 Free Papers 1 Spinal cord injury T. Takahashi	
Room 4 201 (2F)			8:40-9:45 Main Theme 5 Spinal cord injury T. Takahashi	9:45-10:30 Main Theme 6 Spinal cord injury T. Takahashi	11:00-12:05 Main Theme 7 Spinal cord injury T. Takahashi	12:15-13:15 Luncheon Seminar 4 S. Teraoka				15:15-16:15 Luncheon Seminar 3 T. Kaneko, S. Teraoka	16:45-17:45 Main Theme 7 Spinal cord injury T. Takahashi	17:45-18:30 Free Papers 2 Spinal cord injury T. Takahashi	
Room 5 301 (3F)			8:40-9:45 Free Papers 3 Spinal cord injury T. Takahashi	9:45-10:30 Invited Lecture 1 T. Takahashi	11:00-12:05 Invited Lecture 2 T. Takahashi	12:15-13:15 Luncheon Seminar 5 T. Takahashi				15:15-16:15 Luncheon Seminar 4 K. Yamada, M. Akazawa	16:45-17:45 Invited Lecture 3 T. Takahashi	17:45-18:30 Free Papers 3 Spinal cord injury T. Takahashi	
Room 6 302 (3F)			8:40-9:45 Free Papers 4 Spinal cord injury T. Takahashi	9:45-10:30 Free Papers 5 Spinal cord injury T. Takahashi	11:00-11:50 Free Papers 6 Spinal cord injury T. Takahashi	12:15-13:15 Luncheon Seminar 6 K. Yamada				15:15-16:15 Luncheon Seminar 5 S. Teraoka, M. Akazawa	16:45-17:45 Free Papers 7 Spinal cord injury T. Takahashi	17:45-18:40 Free Papers 8 Spinal cord injury T. Takahashi	
Room 7 303 (3F)			8:45-9:45 English Presentation Award 1	9:30-10:30 English Presentation Award 2	11:00-12:05 English Presentation Award 3	12:15-13:15 Luncheon Seminar 7 T. Ohta, N.Y. Wang				15:15-16:15 English Presentation Award 4	16:40-17:40 English Presentation Award 5	17:40-18:40 Free Papers 9 Spinal cord injury T. Takahashi	
Room 8 304 (3F)			8:40-9:45 English Presentation Award 5	9:30-10:30 English Presentation Award 6	11:00-12:05 English Presentation Award 7					15:15-16:15 English Presentation Award 6	16:40-17:40 English Presentation Award 7	17:40-18:40 Free Papers 10 Spinal cord injury T. Takahashi	
Room 9 103 (1F)			8:40-9:45 Free Papers 11 Spinal cord injury T. Takahashi	9:30-10:30 Free Papers 12 Spinal cord injury T. Takahashi	11:00-12:05 Free Papers 13 Spinal cord injury T. Takahashi	12:15-13:15 Luncheon Seminar 8 K. Yamada				15:15-16:15 Luncheon Seminar 7 K. Yamada, M. Akazawa	16:40-17:40 Free Papers 14 Spinal cord injury T. Takahashi	17:40-18:40 Free Papers 15 Spinal cord injury T. Takahashi	
Room 10 105 (1F)										15:15-17:15 Hand-on Seminar 1 Spinal Cord Injury M. Akazawa, M. Teraoka			
Poster Room Exhibition Hall B, Makuhari Messe				8:30-12:30 Poster Mounting				13:30-16:40 Poster Viewing			16:30-18:40 Poster Presentation		18:40-20:00 Welcome Reception

The Second Day-April 18 (Friday)

English Session Wordy Live Translation & Captioned

Venue	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	
Room 1 Convention Hall A (2F)		8:30-9:30 Symposium 2 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	9:30-10:30 Symposium 3 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	10:30-11:30 Symposium 4 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	11:30-12:30 Symposium 5 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	12:30-13:30 Luncheon Seminar 9 K. Yamada, M. Akazawa	13:30-14:30 Luncheon Seminar 10 K. Yamada, M. Akazawa	14:30-15:30 Luncheon Seminar 11 K. Yamada, M. Akazawa	15:30-16:30 Luncheon Seminar 12 K. Yamada, M. Akazawa	16:30-17:30 Luncheon Seminar 13 K. Yamada, M. Akazawa	17:30-18:30 Luncheon Seminar 14 K. Yamada, M. Akazawa	18:30-19:30 Luncheon Seminar 15 K. Yamada, M. Akazawa	19:30-20:30 Luncheon Seminar 16 K. Yamada, M. Akazawa
Room 2 Convention Hall B (2F)		8:30-9:30 Educational Lecture 3 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	9:30-10:30 Educational Lecture 4 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	10:30-11:30 Educational Lecture 5 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	11:30-12:30 Educational Lecture 6 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	12:30-13:30 Luncheon Seminar 17 K. Yamada, M. Akazawa	13:30-14:30 Luncheon Seminar 18 K. Yamada, M. Akazawa	14:30-15:30 Luncheon Seminar 19 K. Yamada, M. Akazawa	15:30-16:30 Luncheon Seminar 20 K. Yamada, M. Akazawa	16:30-17:30 Luncheon Seminar 21 K. Yamada, M. Akazawa	17:30-18:30 Luncheon Seminar 22 K. Yamada, M. Akazawa	18:30-19:30 Luncheon Seminar 23 K. Yamada, M. Akazawa	19:30-20:30 Luncheon Seminar 24 K. Yamada, M. Akazawa
Room 3 International Conference Room (2F)		8:30-9:30 Symposium 6 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	9:30-10:30 Symposium 7 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	10:30-11:30 Symposium 8 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	11:30-12:30 Symposium 9 Spinal Cord Injury M. Akazawa, M. Ishihara, H. Matsui, T. Takahashi, K. Yamashita	12:30-13:30 Luncheon Seminar 25 K. Yamada, M. Akazawa	13:30-14:30 Luncheon Seminar 26 K. Yamada, M. Akazawa	14:30-15:30 Luncheon Seminar 27 K. Yamada, M. Akazawa	15:30-16:30 Luncheon Seminar 28 K. Yamada, M. Akazawa	16:30-17:30 Luncheon Seminar 29 K. Yamada, M. Akazawa	17:30-18:30 Luncheon Seminar 30 K. Yamada, M. Akazawa	18:30-19:30 Luncheon Seminar 31 K. Yamada, M. Akazawa	19:30-20:30 Luncheon Seminar 32 K. Yamada, M. Akazawa
Room 4 201 (2F)	8:30-9:30 Morning Seminar 1 Spinal cord injury T. Takahashi	9:30-10:30 Main Theme 8 Spinal cord injury T. Takahashi	10:30-11:30 Main Theme 9 Spinal cord injury T. Takahashi	11:30-12:30 Main Theme 10 Spinal cord injury T. Takahashi	12:30-13:30 Main Theme 11 Spinal cord injury T. Takahashi	13:30-14:30 Luncheon Seminar 24 K. Yamada, M. Akazawa	14:30-15:30 Luncheon Seminar 25 K. Yamada, M. Akazawa	15:30-16:30 Luncheon Seminar 26 K. Yamada, M. Akazawa	16:30-17:30 Luncheon Seminar 27 K. Yamada, M. Akazawa	17:30-18:30 Luncheon Seminar 28 K. Yamada, M. Akazawa	18:30-19:30 Luncheon Seminar 29 K. Yamada, M. Akazawa	19:30-20:30 Luncheon Seminar 30 K. Yamada, M. Akazawa	
Room 5 301 (3F)		8:30-9:30 Invited Lecture 3 T. Takahashi	9:30-10:30 Invited Lecture 4 T. Takahashi	10:30-11:30 Invited Lecture 5 T. Takahashi	11:30-12:30 Invited Lecture 6 T. Takahashi	12:30-13:30 Luncheon Seminar 29 K. Yamada, M. Akazawa	13:30-14:30 Luncheon Seminar 30 K. Yamada, M. Akazawa	14:30-15:30 Luncheon Seminar 31 K. Yamada, M. Akazawa	15:30-16:30 Luncheon Seminar 32 K. Yamada, M. Akazawa	16:30-17:30 Luncheon Seminar 33 K. Yamada, M. Akazawa	17:30-18:30 Luncheon Seminar 34 K. Yamada, M. Akazawa	18:30-19:30 Luncheon Seminar 35 K. Yamada, M. Akazawa	
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Room 7 303 (3F)	8:30-9:30 Morning Seminar 3 Spinal cord injury T. Takahashi	9:30-10:30 Free Papers 20 Spinal cord injury T. Takahashi	10:30-11:30 Free Papers 21 Spinal cord injury T. Takahashi	11:30-12:30 Free Papers 22 Spinal cord injury T. Takahashi	12:30-13:30 Free Papers 23 Spinal cord injury T. Takahashi	13:30-14:30 Luncheon Seminar 40 K. Yamada, M. Akazawa	14:30-15:30 Luncheon Seminar 41 K. Yamada, M. Akazawa	15:30-16:30 Luncheon Seminar 42 K. Yamada, M. Akazawa	16:30-17:30 Luncheon Seminar 43 K. Yamada, M. Akazawa	17:30-18:30 Free Papers 27 Spinal cord injury T. Takahashi	18:30-19:30 Free Papers 28 Spinal cord injury T. Takahashi	19:30-20:30 Free Papers 29 Spinal cord injury T. Takahashi	
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Room 10 105 (1F)		8:30-10:30 Hand-on Seminar 2 Spinal Cord Injury M. Akazawa, M. Teraoka											
Poster Room Exhibition Hall B, Makuhari Messe			8:30-20:30 Poster Presentation			10:30-16:30 Poster Viewing				16:30-18:30 Poster Presentation			

The Third Day-April 19 (Saturday)

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Room	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00
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Room 2 Convention Hall B (2F)				9:00-10:00 Main Theme 16 1. Main Theme 16 2. Main Theme 16	11:00-12:00 Main Theme 17 1. Main Theme 17 2. Main Theme 17	12:00-13:00 Education (Session 9) 1. Education (Session 9) 2. Education (Session 9)						
Room 3 International Conference Room (2F)				9:00-10:00 Main Theme 18 1. Main Theme 18 2. Main Theme 18	11:00-12:00 Main Theme 19 1. Main Theme 19 2. Main Theme 19	12:00-13:00 Free Papers 26 1. Free Papers 26 2. Free Papers 26						
Room 4 301 (2F)				9:00-10:00 Free Papers 40 1. Free Papers 40 2. Free Papers 40	11:00-12:00 Free Papers 41 1. Free Papers 41 2. Free Papers 41	12:00-13:00 Free Papers 42 1. Free Papers 42 2. Free Papers 42						
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Room 9 103 (1F)				9:00-10:00 Free Papers 55 1. Free Papers 55 2. Free Papers 55	11:00-12:00 Free Papers 56 1. Free Papers 56 2. Free Papers 56	12:00-13:00 Free Papers 57 1. Free Papers 57 2. Free Papers 57						
Room 10 105 (1F)				9:00-10:00 Poster Session 1 1. Poster Session 1 2. Poster Session 1								
Poster Room Exhibition Hall & Makuhari Messe					9:00-12:00 Poster Presentation		12:00-13:00 Poster Session					

1-7-EPA4-2	Genome-wide association study of lumbar degenerative kyphosis: A multicenter study by 6 universities in Tohoku district183 K. Hashimoto, et al. , Dept. of Orthop. Surg., Tohoku Univ. Graduate School of Medicine
1-7-EPA4-3	Results and complications of scoliotic patients treated in France and Belgium by growing rods (Nemost implant) with a minimum 2-year follow-up183 M. Baudoux, et al. , Hopitaux Civils de Lyon, Hopital Femme Mere Enfant, Orthop. Pediatrique, France
1-7-EPA4-4	Resting-state functional magnetic resonance imaging indices are related to electrophysiological dysfunction in degenerative cervical myelopathy184 H. Suzuki, et al. , Dept. of Orthop. Surg., Yamaguchi Univ. Graduate School of Medicine
1-7-EPA4-5	The relationship between failure of pelvic restoration and hamstring tightness after adult spine deformity surgery184 H.-J. Kim, et al. , Center and Dept. of Orthop. Surg., Seoul National Univ. College of Medicine and Seoul National Univ. Bundang Hosp., Seoul National Univ. Bundang Hosp., Korea
1-7-EPA4-6	GUARD Technique and Delayed Ligamentum Flavectomy: Reducing Neurological Complications in Uniportal Full-Endoscopic TLIF185 C.-L. Lin, et al. , Dept. of Orthop. Surg., National Cheng Kung Univ. Hosp., Tainan, Taiwan
1-7-EPA4-7	Could Enlarged Cervical Canal Diameter in Conventional Plain Lateral Radiographs Indicate the Presence of Syringomyelia? A Propensity Score Matched Study185 S. Chandrasegaran, et al. , Dept. of Orthop. Surg., National Orthop. Centre of Excellence for Research and Learning (NOCERAL), Faculty of Medicine, Univ. Malaya, Kuala Lumpur, Malaysia

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Moderator : **K. Ishii**

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1-7-F9-1	Multifidus Cervicis originates from the C5 and C6 lateral mass: Radiological analysis using sagittal MRI186 K. Kitamura, et al. , Dept. of Orthop. Surg., National Defense Medical College
1-7-F9-2	Clinical and Imaging Features of Patients with Cervical Compressive Myelopathy Presenting Unilateral Motor Deficits186 M. Sato, et al. , Dept. of Orthop. Surg., Yokohama Hodogaya Central Hosp.
1-7-F9-3	Is the relative height of the upper edge of lamina to the rostral endplate of vertebral body associated with spinal cord compression?187 D. Kakegami, et al. , Dept. of Orthop. Surg., National Defense Medical College