·述　　评·

开放获取

关注膝关节伤病诊疗难点误区与对策的研究

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摘要： 随着膝关节镜手术技术和器械发展，膝关节伤病诊疗水平提高，但出现重视手术操作、轻视诊断能力的不良现象常常导致误诊误治。《中国矫形外科杂志》本期重点刊出膝关节伤病诊疗相关内容：一是关注临床基础工作避免误诊漏诊，要重视病史采集等基础工作，减少因基础知识不牢、盲目自信等导致的误诊漏诊，以膝关节多韧带损伤为例分析了诊疗进展与误区，强调加强年轻医生培训、各级专家传帮带、临床医生贴近临床细致工作的重要性。结合后交叉韧带损伤诊断困难，介绍了屈曲 90°位磁共振影像将常规后交叉韧带“?”状影像变成直线状，使诊断更直观、更精确；二是关注手术适应证与标准化操作避免术中术后并发症，持续研究膝关节伤病手术适应证等标准化流程，本期对外侧半月板缝合术中损伤神经血管、镜下腘窝囊肿术如何减少术后复发等热点争议问题进行分析总结；三是关注创新与新技术开展，避免手术进入误区，正确理解创新内涵，开展新技术要符合多方面原则，结合外侧半月板缝合和后交叉韧带术中损伤腘窝血管神经等严重并发症，强调未认真评估手术能力盲目开展新技术的风险，提醒医生依据自身条件循序渐进开展手术；四是关注临床基础研究提高膝关节伤病诊疗水平，重点是生物力学、解剖病理学、影像学、新材料、新术式的基础研究。本期刊出了膝前交叉韧带修复及重建术后再次损伤翻修等热点难点问题的一些手术方式选择，并强调加强围手术期康复护理研究。

关键词： 膝关节镜术，膝外科，误诊，误治

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Pay attention to the research on the difficulties, misunderstandings and countermeasures in the diagnosis and treatment of knee injuries // *HUANG Chang-ming[1], SUN Lei[2]. 1. Department of Orthopedics, Hospital of PLA 73rd Group Army (Chenggong Hospital, Xiamen University), Xiamen 361003, Fujian, China; 2. Department of Orthopedics, China Rongtong 88th Hospital, Tai'an 271000, Shandong, China*

Abstract: With the development of arthroscopic knee surgery techniques and instruments, the diagnosis and treatment level of knee joint injuries has improved. However, the undesirable phenomenon of emphasizing surgical operations while neglecting diagnostic capabilities has emerged, resulting in misdiagnosis and mistreatment. This issue of the Orthopedic Journal of China features key content related to the diagnosis and treatment of knee injuries: First, pay attention to clinical basic work to avoid misdiagnosis and missed diagnosis. It is necessary to attach importance to basic work such as medical history collection, and reduce misdiagnosis and missed diagnosis caused by weak basic knowledge and blind confidence. Taking multiple ligament injuries of the knee as an example, this paper analyzes the progress and misunderstandings in diagnosis and treatment, and emphasizes the importance of strengthening the training of young doctors, the mentorship and guidance of experts at all levels, and the meticulous work of clinical doctors close to clinical practice. Combined with the difficulty in diagnosing posterior cruciate ligament injury, this paper introduces the application of MRI at 90° flexion position to change the "?"-shaped PCL sign in conventional examination into a "straight lines", making the diagnosis more intuitive and accurate. Second, pay attention to surgical indications and standardized operations to avoid intraoperative and postoperative complications. Continuously study standardized procedures such as surgical indications for knee injuries. This issue analyzes and summarizes hot and controversial events, such as nerve and blood vessel injury during lateral meniscus suture and how to reduce postoperative recurrence during arthroscopic popliteal cyst surgery. Third, pay attention to innovation and the development of new technologies to avoid surgical misunderstandings. Correctly understand the connotation of innovation. The development of new technologies should comply with multiple principles. Considering serious complications, such as intraoperative injury to the popliteal vessels and nerves during lateral meniscus suture, and posterior cruciate ligament surgery, emphasize the risks of blindly developing new technologies without carefully assessing surgical capabilities, and remind doc-

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tors to carry out surgeries step by step based on their own conditions. Fourth, focus on clinical basic research to improve the diagnosis and treatment level of knee diseases, with an emphasis on basic research in biomechanics, anatomical pathology, imaging, new materials, and new surgical methods. This issue publishes some surgical approach options for hot and difficult issues, such as revision of re-injured anterior cruciate ligament after repair and reconstruction, and emphasizes strengthening the research on perioperative rehabilitation nursing.

Key words: knee arthroscopy, knee surgery, misdiagnosis, mistreatment

随着膝关节镜手术技术不断创新与手术器械革新，新技术新业务大量涌现，膝关节伤病的诊断与治疗水平得到不断的提高。但临床上常有重视手术操作、轻视诊断能力的不良现象，造成不少疾病的误诊误治。为此，本期《中国矫形外科杂志》重点刊出膝关节常见伤病诊疗热点与难点、诊疗过程中出现的误区、并发症和不良反应，结合相关病例与文献进行全面分析，并提出针对性对策，以期提醒临床医生重视膝关节伤病的诊疗中难点与误区，并做好防范措施。

1 关注临床基础工作，避免误诊漏诊

要重视临床医生基础工作，特别是病史采集、致伤病原因分析、详细体格检查，培养良好的诊断思维，减少误诊漏诊。有的医生专业基础知识不牢，有的盲目自信，诊疗草率导致误诊漏诊。有不少的医生在诊疗过程中只看片子不做患者体格检查比较普遍，是十分可怕的。

膝关节脱位患者中常见漏诊血管损伤、多韧带损伤，特别是漏诊后交叉韧带损伤。此外，将后交叉韧带损伤误为前交叉韧带损伤亦不少见。对一些常见疾病与损伤的辅助检查缺乏思考分析与研究，如本期刊出的屈曲 90°位磁共振诊断陈旧性后交叉韧带损伤的诊断分析与临床意义，对诊断后交叉韧带损伤提供帮助，尤其是屈曲 90°位磁共振影像将常规后交叉韧带“?”状影像变成直线状，使诊断更直观、更精确。

因此，加强年轻医生专科基础知识的培训十分必要，且非一朝一夕就能做好的。除加强临床基本功的训练外，还要加强相关学科基础知识学习培训，需要临床各级专家的传、帮、带，年轻医生更要加强经验教训的总结，打好临床基本功。临床医生必须贴近临床，特别在接诊时一定要细致询问病史，临床检查要到位，不放过任何疑点，是防止漏诊的关键。对于神经、血管、肌肉和韧带的损伤，感觉、运动必须通过临床认真精细的查体，结合影像学资料的分析，才会得出明确的诊断和正确的处理。在此，提醒临床医生，要拓宽诊断思路，认真做好鉴别诊断，减少膝关节伤病的误诊漏诊。

2 关注手术适应证与标准化操作，避免术中术后并发症

要持续关注膝关节伤病手术适应证、标准化和规范化治疗流程的研究。在膝关节伤病中的前交叉韧带损伤[1~18]、后交叉韧带损伤[19~22]、半月板损伤与中央化、多韧带损伤与膝关节脱位、腘窝囊肿、前交叉韧带重建术后再损伤翻修、镜下处理关节周围骨折等[23~31]治疗选择仍有不少争议，备受大家关注。

本期着重对合并内侧半月板桶柄撕裂或胫骨后外侧平台骨折的前交叉韧带损伤、前交叉韧带股骨侧悬吊固定选择、外侧半月板缝合术中损伤神经血管、镜下腘窝囊肿术中如何减少术后复发等热点问题进行分析总结，以提高对其诊疗的认识。本期详细介绍后交叉韧带重建修复术中合并或导致腘动脉损伤的原因，并报道如何通过髁间窝入路保残重建后交叉韧带损伤手术技巧与要点、在同侧胫骨干骨折交锁髓内钉固定的同时如何进行后交叉韧带重建、难复性膝关节脱位分期手术中、如何避免术中意外与并发症，值得大家关注。

3 关注创新与新技术开展，避免手术进入误区

创新是事业发展的驱动力，但不是别人没有做过的就是创新，要正确理解创新的真正内涵。创新是要符合人体解剖、生物力学等原则。新手术设计要关注膝关节解剖、病理生理、生物力学和医学伦理，还要充分论证、解剖模拟，不要一味图新图快，否则易造成严重手术并发症。要特别注意的是，关节镜微创技术，并非无创，如使用不当或培训不到位，盲目开展新技术，会给患者带来灾难性后果。

本期提到的后交叉韧带重建 Inlay 技术和后交叉韧带胫骨止点骨折，可通过切开手术方式或关节镜下修复，均可达到良好效果[27, 28, 30]。在具体治疗选择开放切开或是关节镜仍有不少争议，尤其是镜下手术倍受许多膝关节镜医生关注与青睐，本期介绍了镜下缝线联合 Tightrope 固定治疗 PCL 止点撕脱性骨折手术方法。但不少医生没有开放后交叉韧带重建 Inlay

技术和后交叉韧带胫骨止点骨折手术经验，一味急于开展关节镜下手术，常因关节镜技术不过关、解剖认识不到位，急于向别人展示自己膝关节手术技术，结果术中造成膝后方血管神经损伤，给患者带来难以接受的灾难性后果。本期刊出的后交叉韧带重建修复术中腘动脉损伤诊疗失误与对策、腘窝囊肿镜下术后复发原因与对策，值得关注。

因此，医生要根据自身条件，做好解剖和手术模拟，循序渐进地开展创新与新技术，切勿急进，否则易发生意外与并发症[32]。

4 关注临床基础研究，提高膝关节伤病诊疗水平

要提高膝关节伤病诊断治疗水平，必须关注膝关节生物力学、解剖病理学、影像学、新材料、新术式的基础研究[33~39]。要用理论指导实践，没有理论指导的实践是盲目的实践。

如对于膝前交叉韧带术后再次损伤如何翻修，是一期或二期翻修、是单纯翻修还是加强前外侧结构、是结合前外侧韧带重建或是关节外肌腱固定加强仍有诸多争议。本期报道的联合改良 Lemaire 手术翻修前交叉韧带重建术后再断裂，分析了前外侧韧带重建和关节外肌腱固定加强手术优缺点，提出了改良 Lemaire 手术原则及注意事项，为膝关节前交叉韧带术后翻修提供了一种选择。关节软骨损伤、急性前交叉韧带损伤修复或重建，一直是膝关节损伤研究热点与难点，本期介绍一种胶原蛋白软骨支架修复膝关节软骨损伤和前交叉韧带镜下缝合固定技术，为微创治疗膝关节软骨损伤和前交叉韧带损伤提供了一种选择。同时要进一步加强关注膝关节伤病围手术期康复护理研究，以便患者尽早重返工作与训练[40~42]。

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