

半月板の手術は膝関節に対し有害な可能性がある (Abstract VSMK51-03)

膝半月板の手術はその後の変形性関節症発症や軟骨減少を加速化する可能性がある

Meniscal surgery of the knee may accelerate onset of osteoarthritis and cartilage loss in following year

半月板断裂に対する一般的な手術が一部の患者においては変形性関節症や軟骨減少のリスクを上昇させる可能性がある。この研究結果が2014年Radiological Society of North America年次集会で発表された。研究者らは5年間に変形性関節症を発症した355症例の膝、さらに年齢、性別、両膝関節の重症度およびBMIをマッチさせたコントロール群の磁気共鳴画像(MRI)検査の結果を調査した。スタディの対象患者の平均年齢は60.2歳であり、大部分が過剰体重(平均BMI28.3)で、約3分の2が女性であった。全ての膝のうち、31症例が関節炎と診断される前年に半月板手術を施行されており、280症例はMRIで半月板損傷所見を有していたが手術は施行されていなかった。また、解析の一部は半月板損傷のないコントロール症例であった。前年に半月板手術を施行された31症例の膝全てが変形性関節症を発症したのに対し、手術を施行されず半月板損傷を有する膝では165症例(59%)であった。さらに、軟骨減少は手術を施行された膝においてより多かった:手術を施行された膝の80.8%で軟骨減少が認められたのに対し、半月板損傷はあるが手術を施行されていない膝では39.5%であった。

Full Text

A popular surgery to repair meniscal tears may increase the risk of osteoarthritis and cartilage loss in some patients, according to research presented at the 2014 annual meeting of the Radiological Society of North America (RSNA). The findings show that the decision for surgery requires careful consideration in order to avoid accelerated disease onset, researchers said.

"Meniscal surgery is one of the most common orthopedic procedures performed to alleviate pain and improve joint function," said Frank W. Roemer, M.D., from Boston University School of Medicine in Boston and the University of Erlangen-Nuremberg in Erlangen, Germany. "However, increasing evidence is emerging that suggests meniscal surgery may be detrimental to the knee joint."

For the study, Dr. Roemer and colleagues examined data from the Osteoarthritis Initiative, a large, ongoing observational study of knee osteoarthritis incidence and progression. Patients in the study were on average 60.2 years old and predominantly overweight, with a mean body mass index (BMI) of 28.3. Approximately two-thirds of the patients were women.

The researchers studied magnetic resonance imaging (MRI) exams of 355 knees that developed osteoarthritis during a five-year period, and a control group that was matched for age, gender, arthritic severity in both knees and BMI. Of all knees, 31 underwent meniscal surgery during the year prior to the arthritis diagnosis, and 280 knees had signs of meniscal damage on MRI but did not have surgery. Also part of the analysis were control cases with no meniscal damage. The researchers assessed the risk of developing arthritis and cartilage loss during the following year for the different groups.

"We found that patients without knee osteoarthritis who underwent meniscal surgery had a highly increased risk for developing osteoarthritis and cartilage loss in the following year compared to those that did not have surgery, regardless of presence or absence of a meniscal tear in the year before," Dr. Roemer said.

All 31 of the knees that underwent meniscal surgery during the prior year developed osteoarthritis, compared with 165 (59 percent) of the knees with meniscal damage that didn't have surgery. In addition, cartilage loss was much more common among knees that had undergone surgery: 80.8 percent of knees with surgery showed cartilage loss, compared with 39.5 percent of knees with meniscal damage and no surgery.

An alternative to surgery is conservative management. In conservative management, physical therapy is prescribed to help maintain and restore muscle strength and range of motion. Symptoms are commonly treated with ice and non-steroidal anti-inflammatory medications.

"The indications for meniscal surgery might need to be discussed more carefully in order to avoid accelerated knee joint degeneration," Dr. Roemer said.

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RSNA2014 特集

Cardiology

軽症の冠動脈疾患であっても糖尿病患者では高リスクとなる

Oncology

新たな装置によりマンモグラフィーの不快感が緩和する可能性がある

3Dマンモグラフィーは高濃度乳腺におけるがん検出率を向上させる

40歳代の女性においてリスクに基づいたスクリーニングでは乳がんを見逃す

Psychiatry

無症状の動脈硬化は認知機能障害と関連がある

早期アルツハイマーにおいて脳結合の破壊が画像検査により示される

PTSDの兵役経験者においてPET/CTにより脳下垂体異常が示された

Other

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