

Title	Hill-Sachs Lesions in Shoulders With Traumatic Anterior Instability : Evaluation Using Computed Tomography With 3-Dimensional Reconstruction
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論 文 内 容 の 要 旨  
Synopsis of Thesis

氏 名 Name	尾崎 律郎
論文題名 Title	Hill-Sachs Lesions in Shoulders With Traumatic Anterior Instability: Evaluation Using Computed Tomography With 3-Dimensional Reconstruction (外傷性肩関節前方不安定症におけるHill-Sachs損傷：3D-CTを用いた検討)
論文内容の要旨	
〔背景 (Background)〕	
In patients with traumatic anterior shoulder instability, a large Hill-Sachs lesion is a risk factor for postoperative recurrence. However, there is no consensus regarding the occurrence and enlargement of Hill-Sachs lesions.	
〔目的 (Purpose)〕	
To investigate the influence of the number of dislocations and subluxations on the prevalence and size of Hill-Sachs lesions evaluated by computed tomography (CT) with 3-dimensional reconstruction.	
〔方法ならびに成績 (Methods/Results)〕	
The prevalence and size of Hill-Sachs lesions were evaluated preoperatively by CT in 142 shoulders (30 with primary instability and 112 with recurrent instability) before arthroscopic Bankart repair. First, the prevalence of Hill-Sachs lesions was compared with the arthroscopic findings. Then, the size of Hill-Sachs lesions confirmed by arthroscopy was remeasured using the previous CT data. In addition, the relationship of Hill-Sachs lesions with the number of dislocations and subluxations was investigated.	
〔結果 (Results)〕	
Hill-Sachs lesions were detected in 90 shoulders by initial CT evaluation and were found in 118 shoulders at arthroscopy. The Hill-Sachs lesions missed by initial CT were 15 chondral lesions and 13 osseous lesions. However, all 103 osseous Hill-Sachs lesions were detected by reviewing the CT data. In patients with primary subluxation, the prevalence of Hill-Sachs lesions was 26.7%, and the mean length, width, and depth of the lesions (calculated as a percentage of the diameter of the humeral head) were 9.0%, 5.3%, and 2.1%, respectively, while the corresponding numbers for primary dislocation were 73.3%, 27.7%, 14.8%, and 7.0%, all showing statistically significant differences. Among all 142 shoulders, the corresponding numbers were, respectively, 56.3%, 20.7%, 11.2%, and 4.8% in patients who had subluxations but never a dislocation; 83.3%, 33.4%, 19.1%, and 7.6% in patients with 1 episode of dislocation; and 87.5%, 46.8%, 22.2%, and 10.2% in patients with 2 episodes, all showing statistically significant differences. There were no differences in lesion measurements in relation to the number of subluxations.	
〔総括 (Conclusion)〕	
Computed tomography is a useful imaging modality for evaluating Hill-Sachs lesions except for purely cartilaginous lesions. Hill-Sachs lesions were more frequent and larger when the primary episode was dislocation than when it was subluxation. Among patients with recurrent episodes of complete dislocation, the prevalence of Hill-Sachs lesions is increased, and the lesions are larger.	

## 論文審査の結果の要旨及び担当者

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<b>論文審査の結果の要旨</b>	
<p>Hill-Sachs損傷とは、外傷性肩関節前方脱臼・亜脱臼症例の上腕骨頭後外側部にみられる陥凹病変であるが、その発生や拡大の機序については殆ど知られていなかった。</p> <p>今回、脱臼や亜脱臼の回数が増えるとHill-Sachs損傷の発生頻度や大きさが増していくのではないかという仮説の下、外傷性肩関節前方脱臼・亜脱臼に対して手術治療を受けた症例のCT画像を用いてHill-Sachs損傷の発生頻度や大きさを調査し、症例ごとの脱臼・亜脱臼回数との関連性を検討した。その結果、初回受傷例においては、脱臼例で亜脱臼例に比べてHill-Sachs損傷の発生頻度が有意に高く、また、その大きさも有意に大きいことがわかった。さらに、反復例も含めた検討においても、同様の結果が得られ、脱臼回数が増えるにつれてHill-Sachs損傷の発生頻度が高くなり、大きさも増していく傾向があることがわかった。</p> <p>論文審査において、本論文は博士(医学)の学位授与に値すると認められた。</p>	