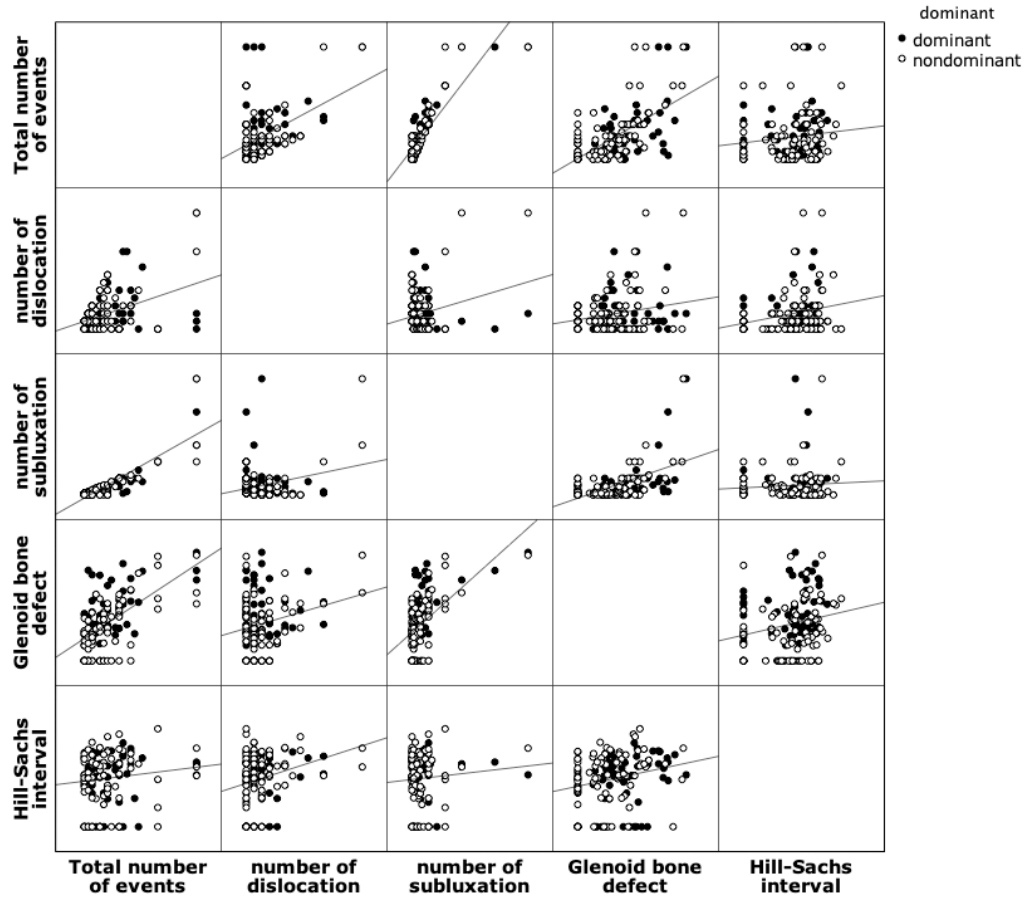


Appendix Figure A1. Correlation Matrix (N = 144)



Values above and below represent Pearson's correlation coefficient and probability, respectively, in each box. HSL: Hill-Sachs lesion, *: significant ($p < 0.05$).

Appendix Table A1. Logistic regression analysis for the risk of a critical and subcritical bipolar bone defect

Independent variables (n)	Critical bipolar bone defect		Subcritical bipolar bone defect	
	Crude	Adjusted	Crude	Adjusted
	Total number of injuries	1.2 (1.1-1.3), <0.01*	1.2 (1.1-1.3), <0.01*	1.2 (1.1-1.3), <0.01*
Age at CT examination	1.1 (1.0-1.3), 0.07	1.3 (0.9-1.9), 0.12	1.0 (0.9-1.1), 0.86	0.9 (0.7-1.3), 0.67
Body mass index	0.9 (0.8-1.1), 0.30	0.9 (0.7-1.1), 0.38	0.9 (0.8-1.0), 0.07	0.9 (0.7-1.0), 0.07
Dislocation (≥ 1) (100)	0.6 (0.3-1.4), 0.21	0.5 (0.2-1.6), 0.22	0.8 (0.4-1.6), 0.50	0.8 (0.3-2.0), 0.68
Category Professional (11)	1.7 (0.4-7.2), 0.47	0.3 (0.01-10.8), 0.51	1.5 (0.4-6.1), 0.56	3.9 (0.2-87.6), 0.39
College (50)	1.4 (0.6-3.4), 0.41	0.6 (0.1-2.5), 0.47	0.7 (0.4-1.5), 0.37	0.8 (0.3-2.4), 0.68
High school (83)	1	1	1	1
Competitive level Division1 (99)	0.7 (0.3-1.7), 0.47	0.9 (0.3-2.8), 0.80	0.6 (0.3-1.4), 0.24	0.9 (0.3-2.3), 0.79
Division2(45)	1	1	1	1
Affected shoulder as dominance (69)	2.2 (1.0-5.1), 0.06	4.9 (1.5-15.8), <0.01*	2.1 (1.1-4.3), 0.03*	2.5 (1.1-5.5), 0.03*
Forwards players (74)	0.5 (0.2-1.2), 0.15	0.5 (0.1-1.6), 0.21	1.0 (0.5-1.9), 0.93	0.8 (0.3-2.1), 0.72
Hyperlaxity (62)	0.4 (0.2-1.0), 0.05	0.6 (0.2-1.7), 0.30	0.5 (0.2-0.9), 0.03*	0.4 (0.2-0.9), 0.03*
Indirect mechanism (132)	0.6 (0.2-1.6), 0.29	0.6 (0.6-2.1), 0.42	0.6 (0.4-1.2), 0.14	0.8 (0.4-1.7), 0.59

Numbers in the fields represent the odds ratio, 95% confidence interval in parentheses, and probability The p -value was calculated from logistic regression analysis, respectively. *significant ($p < 0.05$).

Appendix Table A2.

Statistics of the number of instability events calculated by univariate and multiple logistic regression analysis.

Independent variable(s)	Critical bipolar bone defect		Subcritical bipolar bone defect	
	Dominant	Non-dominant	Dominant	Non-dominant
	the number of instability events (univariate)	1.2 (1.1-1.4), 0.002*, 68.8	1.2 (1.1-1.3), <0.001*, 49.6	1.2 (1.0-1.4), 0.02*, 78.2
the number of instability events, age at CT examination, BMI	1.2 (1.1-1.4), 0.003*, 70.4	1.2 (1.1-1.3), <0.001*, 51.8	1.2 (1.0-1.4), 0.02*, 80.2	1.2 (1.1-1.4), 0.003*, 94.5

CT: computed tomography, BMI: body mass index. Numbers in the fields represent odds ratio, 95% confidential interval in parentheses, probability, and Akaike’s Information Criterion of the number of instability events, respectively. *: significant ($p<0.05$).