

CORRELATION BETWEEN THE HEMOPHILIA JOINT HEALTH SCORE 2.1 (HJHS 2.1) AND THE NUMBER OF PREVIOUS JOINT BLEEDS IN CHILDREN WITH HEMOPHILIA: PRELIMINARY RESULTS.

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OBJECTIVES

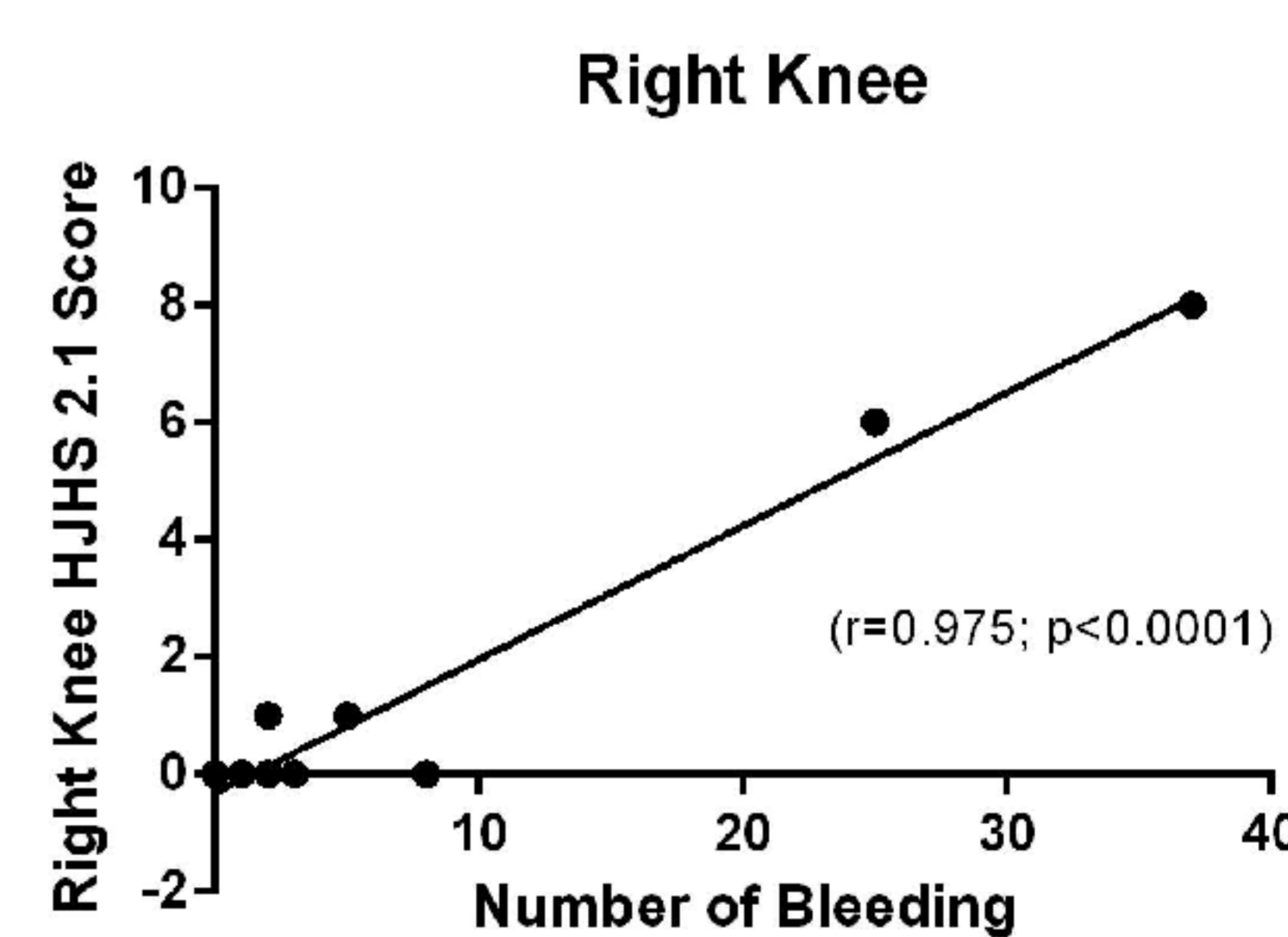
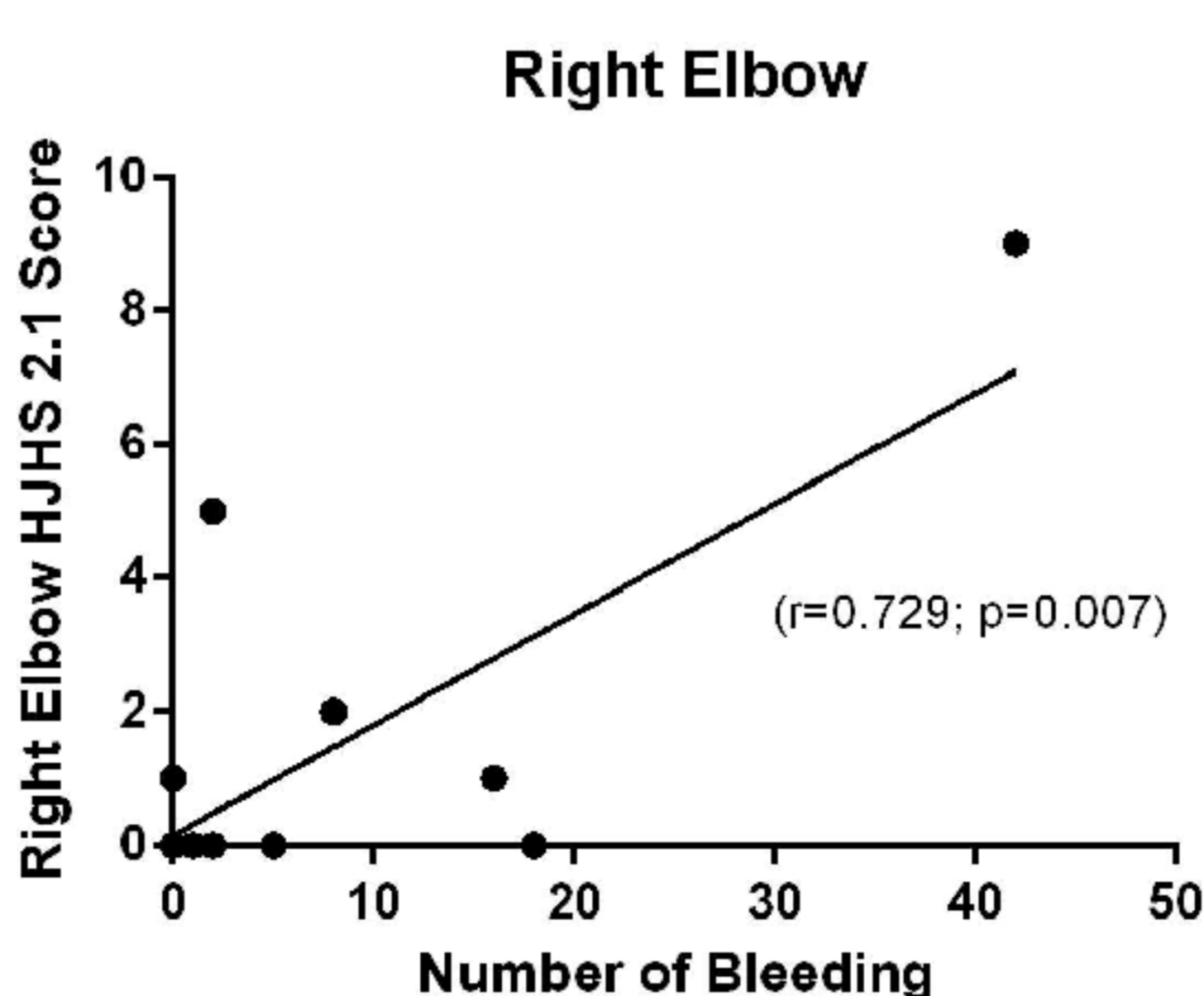
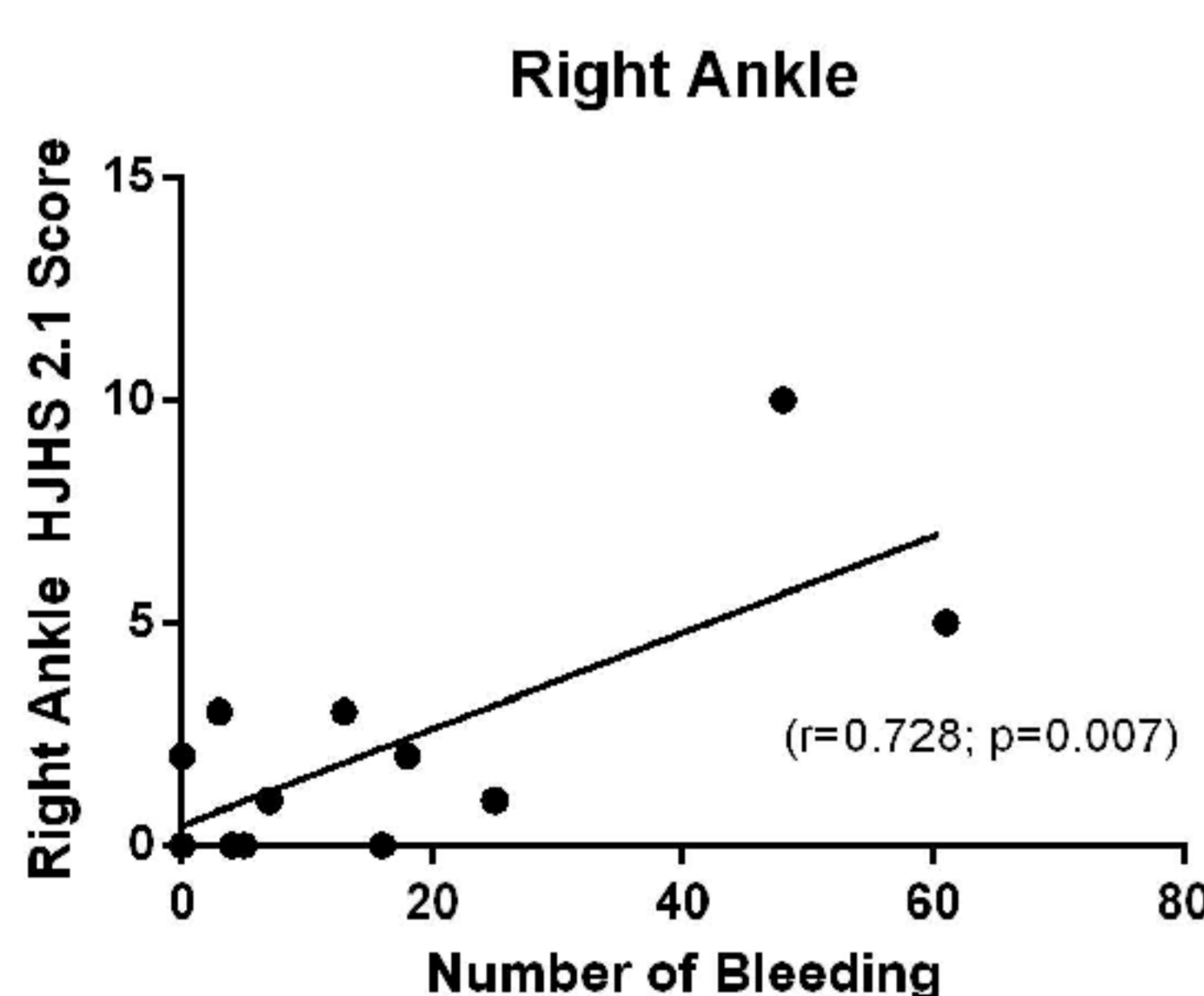
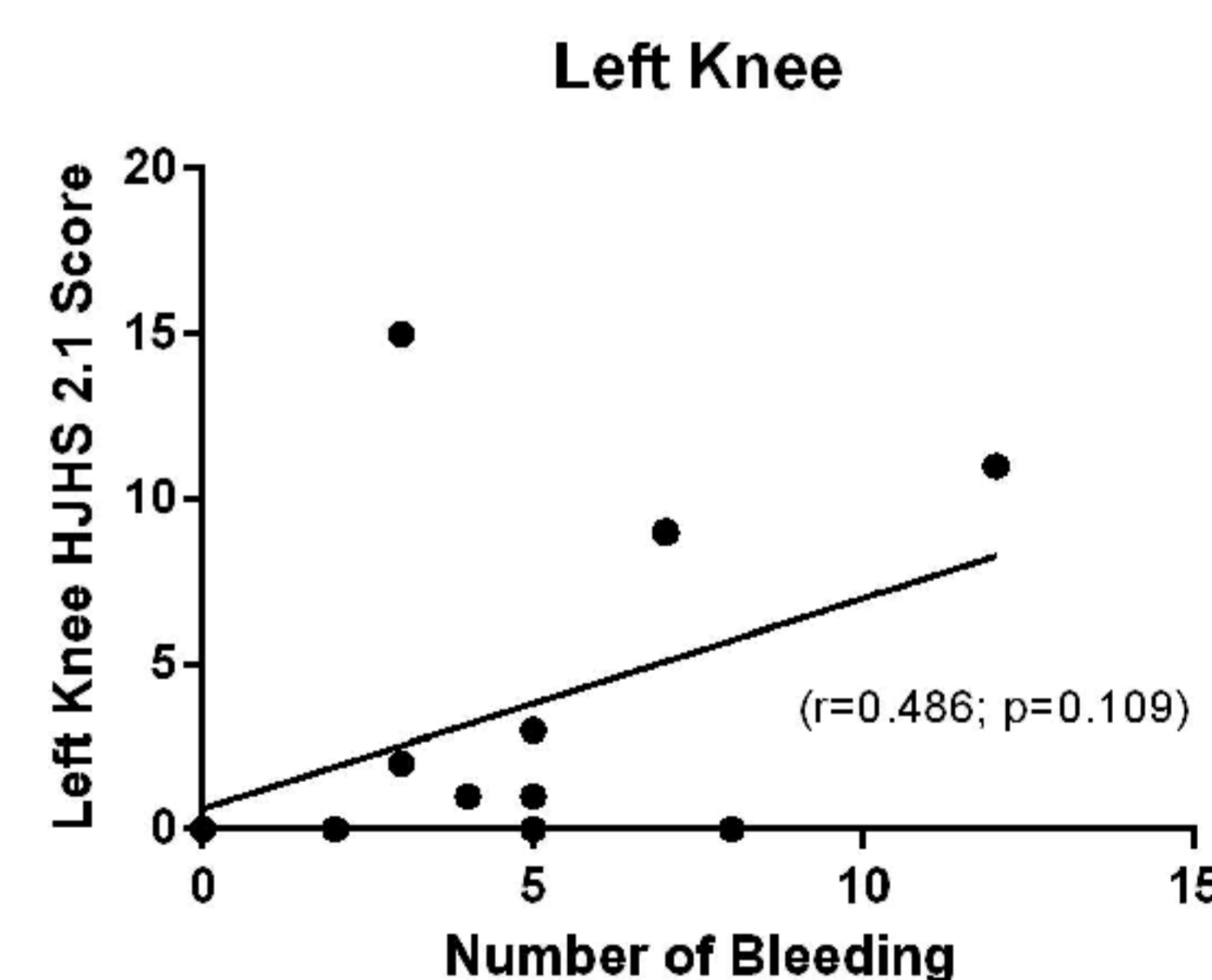
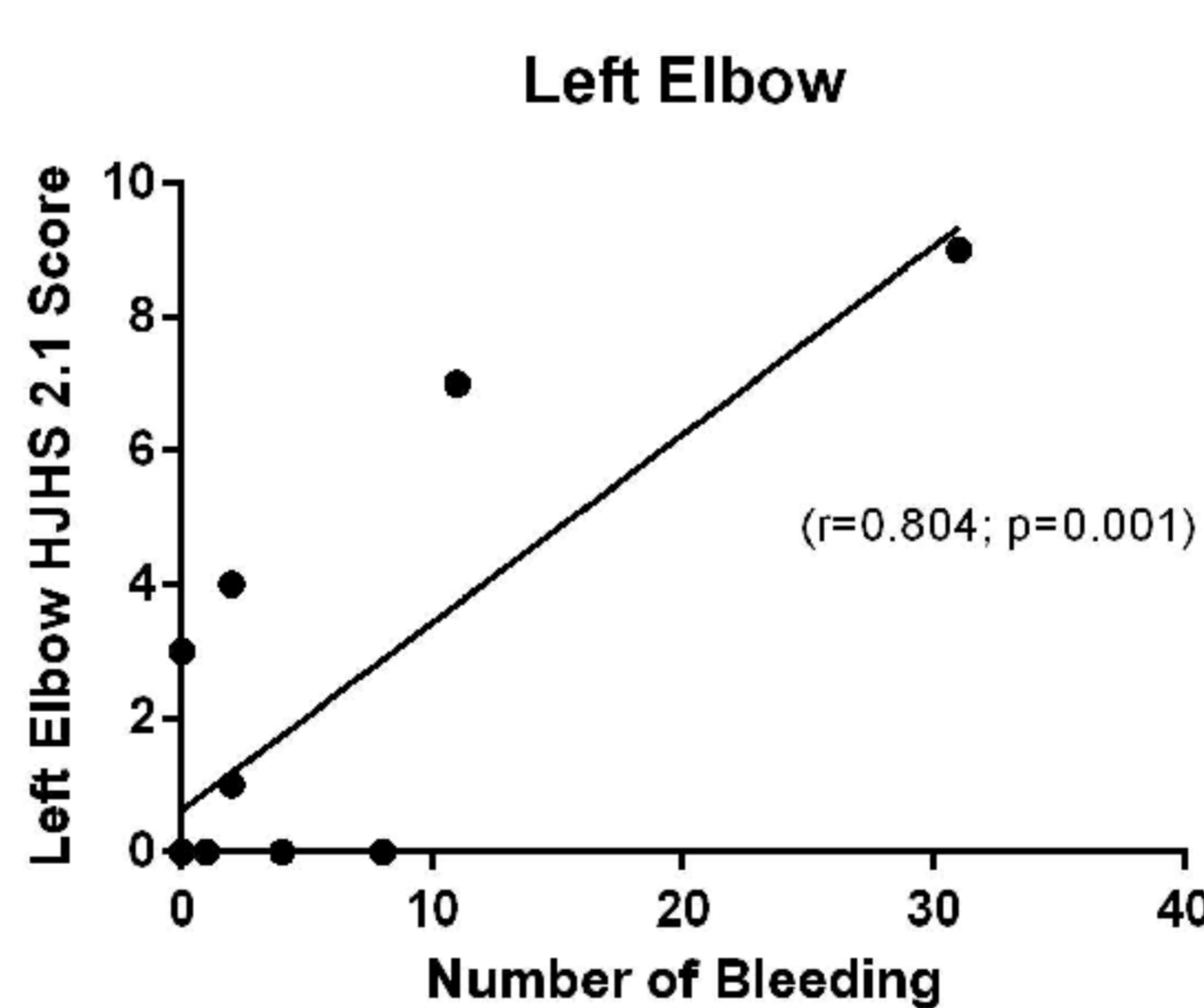
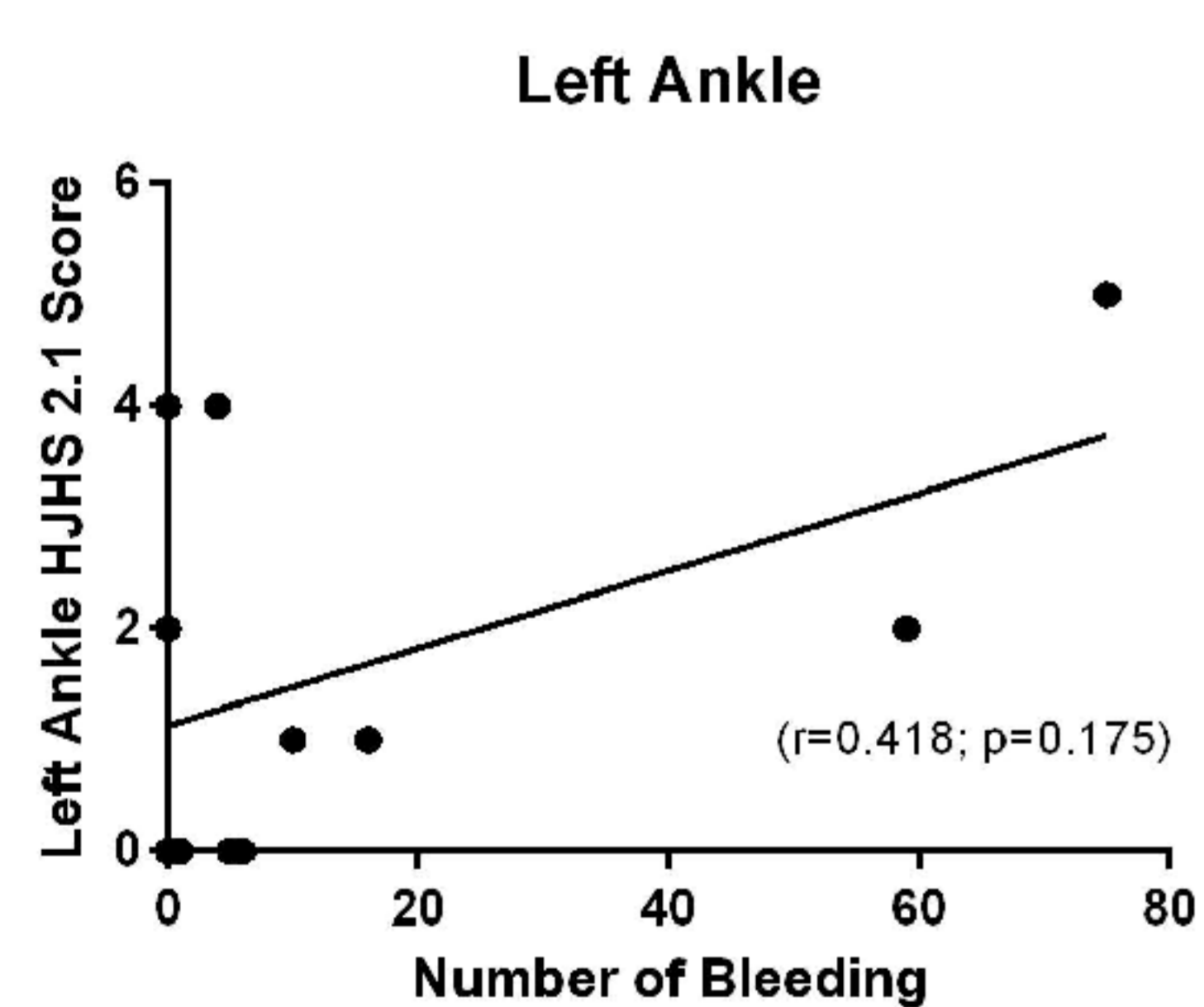
Musculoskeletal assessment tools have been developing in order to improve the reliability of outcome measures in people with hemophilia. The HJHS 2.1 is a physical examination assessment that is designed to pick up subtle early signs of joint damage due to joint bleeds and it showed excellent inter-and intra-rater reliability and validity. Despite the fact that previous studies showed correlation between imaging techniques and number of joint bleeds we still don't know if HJHS has this same ability to correlate with the cumulative history of joint bleeds. Therefore, the objective was to evaluate the correlation between the history of joint bleeding during childhood and the current joint health status evaluated by the HJHS 2.1 scoring tool.

METHODS

Twelve patients with hemophilia (severe n=11; moderate n=1) participated in this study and had all the bleed records reviewed (mean age 14.2 ± 1.7). A full HJHS 2.1 was performed by two physiotherapists in order to assess the current joint health status. After the data was checked by D'Agostino-Pearson omnibus normality test, the Pearson correlation coefficients were calculated between the number of joint bleeds and the respective joint's HJHS score.

RESULTS

The HJHS 2.1 of four joints (out of six joint assessed) showed a strong positive correlation with the previous history of joint bleed: left elbow (r=0.804; p=0.001), right elbow (r=0.729; p=0.007), right knee (r=0.975; p<0.0001) and right ankle (r=0.728; p=0.007). The left ankle and left knee showed a good positive correlation but with no statistical difference (r=0.418; p=0.175 and r=0.486; p=0.109 respectively). Graphs of the correlation (of HJHS score and number of bleeds) for each joint analyzed are shown below:



CONCLUSIONS

The number of joint bleeds experienced during childhood in children with hemophilia correlates in a strong-positive manner with the score obtained using the HJHS 2.1, showing that this assessment tool has the ability to detect the long term effects of cumulative hemarthroses.

REFERENCES

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