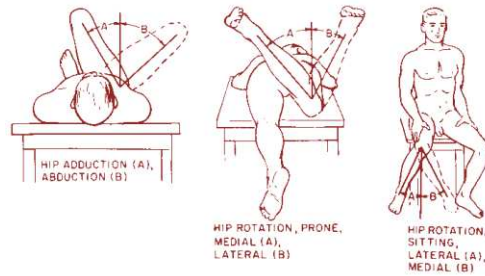


# Does Hip Range of Motion Impact Regenexx-SD Outcome?

## Data Collection

This data is based on our advanced treatment registry which collects outcome information as patients are treated. In particular, it doesn't generalize to all hip stem cell procedures (only Regenexx-SD). Our biostatistician queried data collected by our Chicago RegenexxNetwork site (Mitchell Sheinkop, M.D.) that measured range of motion and hip outcome using various standardized outcome questionnaires.



**Caution!** This is registry data, which is not the same as a drug company style controlled trial.

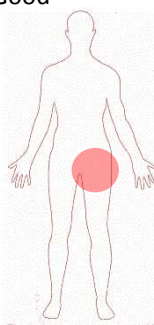
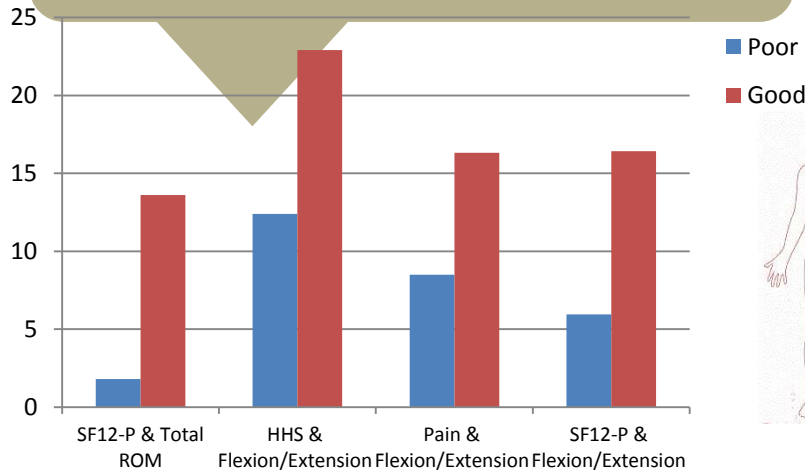
## Summary

- **Significantly decreased hip range of motion is associated with poorer outcomes from a Regenexx-SD hip procedure.**
- **The patient numbers here are less than in some infographics, so this analysis could change once more range of motion measurements become available.**

Does your lack of **hip** range of motion matter?  
**Yes**

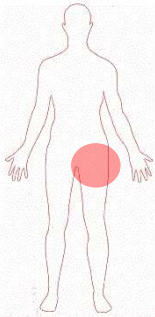
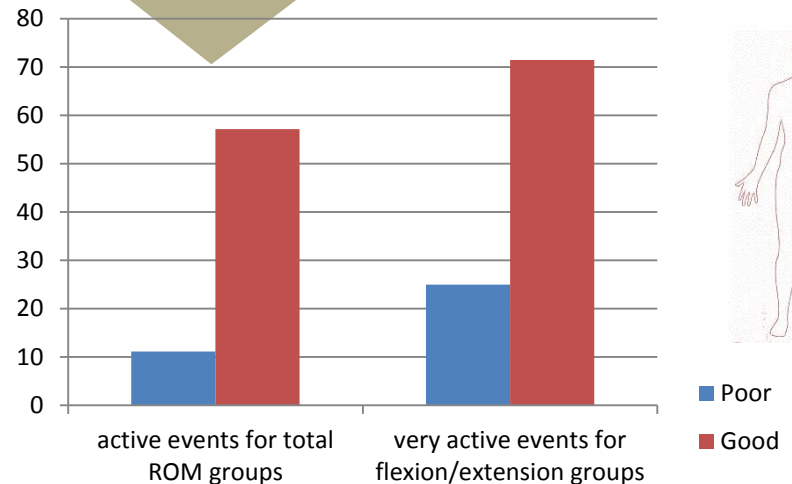
### What does this mean?

These are the means of improvement for each scale in patients who had good or poor range of motion (ROM) in either all planes (Total) or just hip bent forward or backward (Flexion/Extension). Note that the patients with "Good" ROM have higher scores (higher bars) than the patients with "Poor" ROM. These differences were statistically significant ( $p =$  or  $< 0.1$ ).



### What does this mean?

These are the percentage of improved patients for sub-scales of the Harris Hip Score who had either "Good" or "Poor" range of motion (ROM) in all planes "Total" or "Flexion-Extension".



The Regenexx-SD procedure is a same day bone marrow stem cell procedure that isolates the fractions of bone marrow that have the most stem cells.

**Details for Charts:** X-axis indicates the baseline status (Poor ROM vs. Good ROM). The y-axis is the mean of improvement on SF12, HHS and Pain scales (1<sup>st</sup> chart) and the percentage of improvement for active and very active events (2<sup>nd</sup> chart). **Analysis:** Mann-Whitney and Fisher Exact tests for continuous and categorical outcomes respectively. **Total n's and significance for each graph:** Total ROM and SF12-P (n=19, P-value=0.07), Flexion/Extension ROM and HHS (n=22, P-value=0.08), Flexion/Extension ROM and Pain (n=22, P-value=0.1), Flexion/Extension ROM and SF12-P (n=19, P-value=0.08), Total ROM and active events (n=23, P-value=0.03), Flexion/Extension ROM and very active event (n=23, P-value=0.06).