

Data not Dogma

Results from the 2017 AAOS Annual Meeting

The America Academy of Orthopaedic Surgeons Annual Meeting - “*the world’s largest meeting of orthopaedic surgeons, researchers and allied health professionals*” – took place March 14-18 at the San Diego Convention Center in San Diego, California. The Exhibit Hall was lively and dynamic with the industries’ best exhibiting their latest innovations.

Over 500 surgeons and industry personnel visited the SMARTdrill booth to learn about SMARTdrill technology. Our 2017 AAOS Surgeon Survey revealed that surgeons are frustrated with existing technology and their forced reliance upon ‘Dogma not Data’ in the operating room. Specifically, our survey revealed:

- A. 100% of surgeons admitted that they don’t know exactly how many screws to use on either side of the fracture to stabilize it.
- B. 83% use the 6 cortices rule for upper extremity diaphyseal fractures. 69% use the 8 cortices rule for lower extremity diaphyseal fractures. These rules are dogma created decades ago without scientific validation.
- C. 97% replace long and/or short screws, even though 93% think that replacing screws will reduce the pullout strength of the final screw.
- D. 100% of surgeons know thermo-necrosis around a drill hole affects pullout strength of that screw and potentially the entire fixation construct. However, only 14% are confident they know when a drill bit is dull and should be replaced. In addition, only 14% are confident they know when a drill bit is clogged.
- E. 96% have seen hardware failures related to screw stripping problems. And, 62% report that the “two finger tight” rule is a reliable method of preventing screw stripping despite the fact that nobody (0.00%) believes that the grip and finger pinch strengths of all surgeons are they same.

The SMARTdrill provides the Data that never before has been available. The SMARTdrill provides accurate Data on bone depth measurement, bone density, drill bit performance, screw pullout strength, total construct strength, and even prevents the plunge. With the SMARTdrill, surgeons no longer need to be frustrated in the operating room. Relying only on decades-old Dogma will become a thing of the past.

SMARTdrill co-inventors Dr. Mike Karch and Dr. Jack Perry demonstrated SMARTdrill to hundreds of surgeons to prove they can now operate with accurate Data, not Dogma. Dr. Ram Prabhoo, President of the Indian Orthopaedic Society, who each year looks for “one thing to take home to India”, stated that the SMARTdrill was the best innovation at the AAOS, his “take home”. He invited SMD’s surgeons to Mumbai to present the SMARTdrill.

The AAOS surgeons told us they want better tools and better Data. SMARTdrill is the tool that provides this Data. SMARTdrill is Data.