How are you influencing ER/surgical devices?

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Applying Tech

Pressurex[®] sensor film, which measures and characterizes pressure at the interface of virtually any two surfaces, has been used in many biomechanical studies to test and modify the design of surgical devices. It is placed at the interface of contacting surfaces and changes color directly proportional to the pressure

applied. The film can be compared to a color calibration chart or imaged for further analysis and accuracy to $\pm 2\%$.

In a recent study, Pressurex[®] was used to examine the compressive biomechanical behavior of the vertebral end plate with varying sizes of disc replacement implants. Vertebral end plate support is necessary for successful lumbar total disc replacement (TDR) surgery. Failure to achieve anterior column support as a result of lumbar TDR device undersizing could lead to implant subsidence and fracture.

It has also been used in connection with components and surgical procedures relating to total knee anthroplasty over the past 20 years.

Pressurex[®] sensor film conforms to curvaceous surfaces and can be hand or laser cut to specific shapes and dimensions. It reveals the pressure distribution of joint and bone interfaces, and measures impact force in gait analysis and weight bearing responses on prosthesis. **MBT**