Osseo-integrated humeral prosthetic implants can become dislodged from the bone when subjected to high forces, especially soon after implantation. No other percutaneous implant system has successfully addressed this issue.

The inventors have developed a shortened prosthetic implant that contains transverse slots to accept screws. The slots allow a degree of freedom for the implant to migrate toward the shoulder, but it cannot rotate inside the bone or move away from the shoulder, allowing the user to use the prosthetic to its full capability and range of motion soon after implantation. Once the implant has fully healed, an osseo-integrated porous surface bears the load.

TECHNOLOGY SUMMARY
Osseo-integrated humeral prosthetic implants can become dislodged from the bone when subjected to high forces, especially soon after implantation. No other percutaneous implant system has successfully addressed this issue.

FEATURES AND BENEFITS
- Shorter length allows for implantation when little humerus remains.
- Textured shaft facilitates bone ingrowth over time.
- Transverse slots (instead of holes) allow the implant to settle into the bone, but prevent implant dislodgment.
- Transverse screws offer greater initial attachment strength, allowing the user to apply higher force to the prosthetic limb without risk of implant failure.

LEARN MORE
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