Researchers at the University of South Florida have developed the Carrion Cast, an intra-corporal ultra high purity calcium sulfate cast that is mixed with antimicrobials for the treatment of penile implant infections.

Surgical infection has plagued prosthetic surgery since its inception. Despite great advances with penile prosthetic implants, more sophisticated antimicrobial regimens, and improvements in sterile technique, infections are still a major hurdle encountered by all urologists. Currently, the surgical treatment of infected penile prosthesis is comprised of complete removal and either an immediate salvage procedure, which carries a significant infection risk, or delayed implantation. With delayed implantation the risk of infection is lower, but the patient loses penile length and width due to corporal fibrosis. Moreover, the surgical technique is much more challenging in this type of case. It is clear that new and innovative techniques are needed to deal with these troublesome complications, especially in regards to high risk patients.

To mitigate these issues, USF inventors have developed an intra-corporal antibiotic cast using synthetic high purity calcium sulfate. The Carrion Cast provides a medium for which antimicrobial agents can be delivered to a surgical infection site while at the same time acting as a filler that prevents fibrosis and loss of phallic length. This antimicrobial cast lasts 4-6 weeks and provides continuous exposure to antibiotic medication, while making timely re-implantation easier. This novel concept has the potential to change the management of penile implant infections and offers a different approach for treating high-risk patients who are not candidates for immediate salvage replacement.

**ADVANTAGES:**

- Provides continuous local exposure to antibiotic/antifungal medication
- Prevents intra-corporal fibrosis and loss of phallic length
- Ideal for use in high risk/complex patients

**Antibiotic Cast for Treatment of Infected Penile Implant**

**Syringe Containing the Calcium Sulfate and Antimicrobial Mixture**

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