NOVEL TECHNIQUE OF PREPARING ARTICULATED HIP SPACERS - TECHNICAL NOTE

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Introduction: Hip spacers may be either static or articulating. Various techniques are available to make cement spacers. Pre formed spacers are expensive. Literature shows use of Steinman pin, rubber bulb of irrigation syringe, rush pins, k-nail and intramedullary rods to make these spacers. Its purpose is to maintain the tension of soft tissues, guarantee the continuous local release of antibiotics, and reduce hematoma formation.

Discussion: Preparation of the articulated spacer start with single unit custom made rubber bulb femoral stem like which fits into corresponding moulds. There is acylindrical hole in the proximal part to allow injection of cement. Smallest k nail prebend to accommodate the mold and inserted into the mold. The cement is mixed and when it becomes doughy[polymerisation starts] the mould is filled with cement via cement gun. While the cement is allow to set, several sutures pass thru the cement. To make the second layer coating around the stem, a syringe was used. 50 cc syringe was cut and the 1st cement spacer was put into the syringe. Another set of cement was injected into the syringe. Once cement is set, the syringe was cut with knife and the excess of cement is removed with ronguer. Protruding K nail cut with diamond cutter. Once the cement spacer ready, it is inserted and reduced into the hip joint. Sutures that were place thru the cement are used to anchor around the hip joint. This provides additional stability.

Conclusion: Articulating spacers fulfil the goals of the interim construct during two-stage exchange which is to enhance eradication of the infecting organism through drug elution, to maintain limb length, to facilitate exposure during revision surgery, and to improve functional mobilization. The authors present a hybrid suture-cement spacer technique that confers increased stability to the spacer construct.