

Bibliography

J Bone Joint Surg [Br] 1992; 74B; 340-344
The gamma nail for pertrochanteric fractures
 Halder SC

Acta Orthop Belg. 1999;65 Suppl 1:95-6.
Femoral head osteonecrosis: original extra-articular cementoplasty technique. A series of 20 cases.
 Bresler F, Roche O, Chary-Valckenaire I, Blum A, Mole D, Schmitt D.

Instr Course Lect 2004; 53; 441-454
Osteoporotic pertrochanteric hip fractures: management and current controversies
 Lorch DG, Galler DS, Nielsen JH

Arch Orthop Trauma Surg 2004; 124: 692-698
Complications following the treatment trochanteric fractures with the gamma nail
 Hesse B Gächter A

Instr Course Lect 2004; 53; 427-439
Osteoporotic femoral neck fractures: management and current
 Gardner MJ, Lorch DG, Lane JM

Clin Biomech (Bristol, Avon). 2004 Jun;19(5):506-12.
Femoroplasty-augmentation of mechanical properties in the osteoporotic proximal femur: a biomechanical investigation of PMMA reinforcement in cadaver bones.
 Heini PF, Franz T, Fankhauser C, Gasser B, Ganz R.

Spine J. 2004 Jul-Aug;4(4):402-8
Biomechanical study of pedicle screw fixation in severely osteoporotic bone
 Cook SD, Salkeld SL, Stanley T, Faciane A, Miller SI

Scand J Surg. 2006; 95(2):111-8. Review
Cement augmentation in fracture treatment
 Larsson S

Proc to EFFORT 2007, Marrakesh (P546)
Intertrochanteric fractures treated by cement augmentation in osteoporotic elderly patients.
 Dall'Oca C, Lavini F, Carità E, Costa A, Ferrer A, Udali G, Soldà M, Bartolozzi P.

Proc to SIOT 2007, Bologna
Treatment of intertrochanteric fractures in osteoporotic elderly patients with cement augmentation.
 Dall'Oca C, Lavini F, Carità E, Bonometto L, Ferrer A, Bartolozzi P.

Neurosurgery. 2007 Sep;61 (3):531-7 discussion 537-8.
Segmental polymethylmethacrylate-augmented pedicle screw fixation in patients with bone softening caused by osteoporosis and metastatic tumor involvement: et clinical evaluation
 Frankel BM, Jones T, Wang C

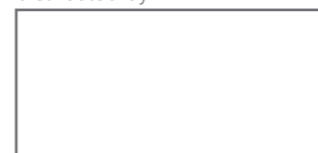
Clin Biomech (Bristol, Avon). 2008 Jan;23(1):45-51.
A new technique for cement augmentation of the sliding hip screw in proximal femur fractures.
 Stoffel KK, Leys T, Damen N, Nicholls RL, Kuster MS

Spine. 2008 May 1;33(10):E317-24
Polymethylmethacrylate augmentation of pedicle screw for osteoporotic spinal surgery: a novel technique
 Chang MC, Liu CL, Chen TH



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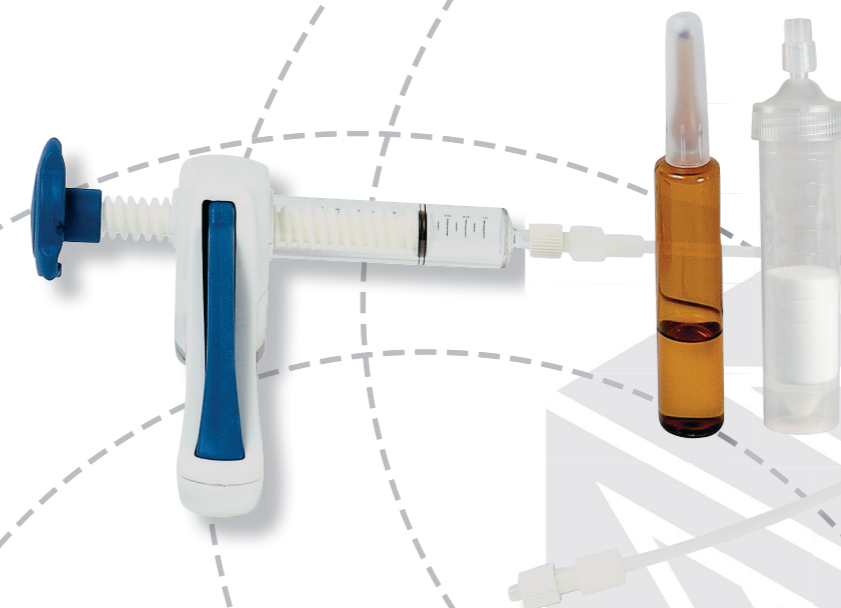
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Tecres has been successfully producing acrylic resins for the last twenty-five-years. Our mission is to continuously seek innovative solutions to improve the quality of life.

The wide range of products we distribute all over the world, in over 60 countries, has enabled us to achieve successful results and to continue our efforts in finding new proposals for the market.

We have therefore launched a new product: The Locker. It is a complete system for the screw augmentation procedure.

THE LOCKER WHY?

Because the synthesis devices can mobilize (especially in osteoporotic bones) leading to the failure of the surgery.

The literature quote many cases. For example the risk of pertrochanteric nail failure (cut-out) goes from 1,1% to 15% (Gadner MJ et al, 2004; Hesse B et al, 2004; Lorich DG et al, 2004; Halder SC et al, 1992).

Because the use of The Locker for screw augmentation significantly reduces the risk of failure.

Various papers demonstrate that the use of screw augmentation eliminate the risk of mobilization of the screws Dall'Oca C et al, 2008 (0% of cut-out with a follow-up of 6 months on 20 gamma nail) Chang MC et al, 2008 (0% of mobilization with a follow-up of 22 months on 291 pedicular screws); Frankel BM et al, 2007 (0% of mobilization with a follow-up of 30 months on 158 pedicular screws).

Because it raises the mechanical stability of the synthesis device.

Biomechanical studies report an increase from 42% to 250% of stability of the synthesis device after screw augmentation (Stoffel KK MJ et al, 2008; Cook SD et al, 2004).

The Locker is a disposable device for the preparation and delivery of acrylic resin to various parts of the body. It is able to strengthen and stabilize the mechanical capacity of synthesis devices applied to osteoporotic bones (screw augmentation).

THE LOCKER KIT includes:

- A special acrylic resin which has a high fluidity and radiographic contrast
- A disposable device which facilitates a controlled and precise resin delivery
- A flexible tube connecting needle and gun while keeping the operator at a safe radiation distance



DEVICE FEATURES:

- Enables a controlled and precise resin delivery
- Enables the immediate suspension of the injection thus ensuring the patient's security
- It is complete and does not require any external accessory

RESIN FEATURES:

- Easy to prepare
- High fluidity for an optimal application
- High radiopacity for an immediate identification of the resin delivered
- Proved viscosity for major control during the injection stage

PREPARATION STAGES

