

Use of Poly(ether ether ketone) Cages in Foot and Ankle Surgery

Gomez et al, Foot and Ankle Clinics, 2012, 449-57. doi: 10.1016

THIS PAPER demonstrates an interesting treatment using PEEK-OPTIMA[®] cages (for fusion and lengthening) in foot and ankle surgery where previous treatment approaches have associated challenges and complications that could be alleviated / minimized. Between 2009 and 2010 the Instituto Dupuytren implanted 32 PEEK-OPTIMA cages in 22 patients who required fusion and column lengthening procedures. These cages were designed specifically for foot and ankle surgery by Equimedica SRL. Box style cages (for cavity and height loss) and wedge style cages (for column lengthening and fusion) were produced in four different sizes each. Of the 32 cages implanted the wedge shape cages saw the most use (15 lengthening and 13 fusion) and the box shape cages were used only in failed Keller procedures(4 cases).

After implantation 22 patients were evaluated with x-ray, CT and clinically. 21 patients saw bone fusion in an average of 14 weeks while 1 patient had a delayed union (20 weeks), which was caused by the cage migrating dorsally as well as two successive stress fractures at 6 and 9 months that went on to heal when treated conservatively.

The authors conclude that PEEK-OPTIMA cages could offer an attractive option over structural bone grafts in foot and ankle surgery due to high fusion rates. Additionally the radiolucent nature of PEEK-OPTIMA allows for a better assessment of fusion and could decrease the complications typically associated with structural bone grafts.



Europe and Asia Pacific
Invibio Ltd.
Technology Centre, Hillhouse International
Thornton Cleveleys, Lancashire FY5 4QD
United Kingdom
Tel: +44 (0) 1253 898000
FAX: +44 (0) 1253 898001

Americas
Invibio Inc.
300 Conshohocken State Road, Suite 120
West Conshohocken, PA 19428
USA
866-INVIBIO (468-4246)
Tel: +484 342 6004
FAX: +484 342 6005

For further information email us at info@invibio.com or please visit our website at:

► www.invibio.com

The information contained herein is believed to be an accurate description of the typical characteristics and/or uses of Invibio product(s). However, it is your ultimate responsibility to determine the performance, efficacy and safety of using Invibio product(s) for a specific application. Suggestions of uses should not be taken as inducements to infringe any particular patent or as a representation that the product is suitable for such uses. INVIBIO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF INTELLECTUAL PROPERTY NON-INFRINGEMENT, INCLUDING, BUT NOT LIMITED TO PATENT NON-INFRINGEMENT, WHICH ARE EXPRESSLY DISCLAIMED, WHETHER EXPRESS OR IMPLIED, IN FACT OR BY LAW. FURTHER, INVIBIO MAKES NO WARRANTY TO YOUR CUSTOMERS OR AGENTS, AND HAS NOT AUTHORIZED ANYONE TO MAKE ANY REPRESENTATION OR WARRANTY OTHER THAN AS PROVIDED ABOVE.

INVIBIO SHALL IN NO EVENT BE LIABLE FOR ANY GENERAL, INDIRECT, SPECIAL, CONSEQUENTIAL, PUNITIVE, INCIDENTAL OR SIMILAR DAMAGES, INCLUDING WITHOUT LIMITATION, DAMAGES FOR HARM TO BUSINESS, LOST PROFITS OR LOST SAVINGS, EVEN IF INVIBIO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, REGARDLESS TO THE FORM OF ACTION.

© 2013 Invibio Biomaterial Solutions.

Invibio® and the Invibio logo are registered trademarks of Invibio Ltd. PEEK-OPTIMA® is a registered trademark of Invibio Ltd.

T-DP-PN-E-0016-A (7/2013)