Grafton™ Demineralized Bone Matrix

Data
- Grafton™ Demineralized Bone Matrix has 20 years of clinical history.
- Grafton™ Demineralized Bone Matrix has over 70 peer-reviewed preclinical and clinical studies.

Fibers
- Grafton™ Demineralized Bone Matrix contains Medtronic’s proprietary bone fiber technology.

Forms
- Long, thin strips with overlapping tabs to create a continuous bone graft on either side of the spine.
- Grafton™ Demineralized Bone Matrix is available in 10 unique forms to meet the needs of varying surgical environments.
- Grafton™ Demineralized Bone Matrix can be used as a bone graft extender, bone graft substitute, and bone void filler to fill bony voids or gaps not intrinsic to the stability of the bone structure.

ORDERING INFORMATION

Grafton™ Strips

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T42275</td>
<td>1cm × 10cm (2)</td>
</tr>
<tr>
<td>T42280</td>
<td>1cm × 20cm (2)</td>
</tr>
</tbody>
</table>

BONE VOID FILLER CASE: MULTI-LEVEL SPINAL FUSION

Confluent bone across the laminar spaces and bridging bone seen on the lateral x-ray posterior to the rods between the screw heads.

Bridging bone across laminar spaces, solid facet fusion, ossification shadows between screw heads.
**CASE OVERVIEW**

- 14-year-old female, 50° right thoracic adolescent idiopathic scoliosis and 65° lumbar curve, Risser 2.
- Marked waist asymmetry and significant lumbar rotation on forward bending that do not resolve in prone position.
- T5-L4 posterior fusion, pedicle screw instrumentation, and Grafton™ Strips.
- Facet joints burled and roughed. Lamina deorticated with a burr.
- 10cm and 20cm Grafton™ Strip placed between spinous process and pedicle screws.

As described by: Dr. Randal Betz, MD; Philadelphia, Pennsylvania

**CASE TECHNIQUE**

**Step 1** Prepared Fusion Bed

- Placed pedicle screws at appropriate levels.
- Buried and roughed the facet joints so they were free of cartilage.

**Step 2** Decortication

- Decorticated the lamina and spinous processes at all levels to be fused.

**Step 3** Placed Grafton™ Strips

- Placed and manipulated rods per appropriate surgical technique. This case used one 10cm and one 20cm Grafton™ Strip, overlapped in a longitudinal position, on each side of the space between the spinous process and pedicle screws.

Preoperative Radiograph

Placement of Grafton™ Strips

Side View of Overlapping Tabs
BONE VOID FILLER CASE: MULTI-LEVEL SPINAL FUSION

Grafton™ Strips
- Data
- Fibers
- Forms
BONE VOID FILLER CASE: MULTI-LEVEL SPINAL FUSION

Grafton™ Strips

- Data
- Fibers
- Forms

Medtronic
GRAFTON® Demineralized Bone Matrix

Data
- GRAFTON® Demineralized Bone Matrix has 20 years of clinical history.
- GRAFTON® Demineralized Bone Matrix has over 70 peer-reviewed preclinical and clinical studies.

Fibers
- GRAFTON® Demineralized Bone Matrix contains Medtronic’s proprietary bone fiber technology.

Forms
- Long, thin strips with overlapping tabs to create a continuous bone graft on either side of the spine.
- GRAFTON® Demineralized Bone Matrix is available in 10 unique forms to meet the needs of varying surgical environments.

GRAFTON® Demineralized Bone Matrix can be used as a bone graft extender, bone graft substitute, and bone void filler to fill bony voids or gaps not intrinsic to the stability of the bony structure.

### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T42275</td>
<td>1cm x 10cm (5)</td>
</tr>
<tr>
<td>T42280</td>
<td>1cm x 20cm (5)</td>
</tr>
</tbody>
</table>

### CASE RESULTS

Bridging bone across intervertebral spaces, solid fusion, bone contact between screw heads.

Confluent bone across the intervertebral spaces and bridging bone seen on the lateral x-ray posterior to the rod between the screw heads.

Medtronic Sofamor Danek USA, Inc.
1800 Pyramid Place
Memphis, TN 38132
(901) 396-3133
(800) 876-3133
Customer Service: (800) 933-2635
medtronic.com

© 2013 Medtronic, Inc. All Rights Reserved. PMD006113-2.0 28843

© 2018 Medtronic. All rights reserved. Medtronic, Medtronic logo and Further Together are trademarks of Medtronic. All other brands are trademarks of a Medtronic company. UC201804013 EN PMD017053-1.0

The surgical technique shown is for illustrative purposes only. The technique(s) actually employed in each case will always depend upon the medical judgment of the surgeon exercised before and during surgery as to the best mode of treatment for each patient.

Please see the package insert for the complete list of indications, warnings, precautions, and other important medical information.

Consult instructions for use at this website www.medtronic.com/manuals.

Note: Manuals can be viewed using a current version of any major internet browser. For best results, use Adobe Acrobat® Reader with the browser.
CASE OVERVIEW

> 14-year-old female, 50° right thoracic adolescent idiopathic scoliosis and 45° lumbar curve, Risser 2.
> Marked waist asymmetry and significant lumbar rotation on forward bending that do not resolve in prone position.
> T3-L6 posterior fusion, pedicle screw instrumentation, and GRAFTON® Strips.
> Facet joints burred and rongeured, lamina decorticated with a burr.
> 10cm and 20cm GRAFTON® Strips placed between spinous process and pedicle screws.

As described by: Dr. Randal Betz, MD, Philadelphia, Pennsylvania

CASE TECHNIQUE

Step 1
Prepared Fusion Bed
Placed pedicle screws at appropriate levels. Burred and rongeured the facet joints so they were free of cartilage.

Step 2
Decortication
Decorticated the lamina and spinous processes at all levels to be fused.

Step 3
Placed Grafton® Strips
Placed and manipulated rods per appropriate surgical technique. This case used one 10cm and one 20cm GRAFTON® Strip, overlapped in a longitudinal position, on each side of the spine between the spinous process and pedicle screws.
Grafton™ Demineralized Bone Matrix

Data
- Grafton™ Demineralized Bone Matrix has 20 years of clinical history.
- Grafton™ Demineralized Bone Matrix has over 70 peer-reviewed preclinical and clinical studies.

Fibers
- Grafton™ Demineralized Bone Matrix contains Medtronic’s proprietary bone fiber technology.

Forms
- Long, thin strips with overlapping tabs to create a continuous bone graft on either side of the spine.
- Grafton™ Demineralized Bone Matrix is available in 16 unique forms to meet the needs of varying surgical environments.
- Grafton™ Demineralized Bone Matrix can be used as a bone graft extender, bone graft substitute, and bone void filler to fill bony voids or gaps not intrinsic to the stability of the bony structure.

ORDERING INFORMATION

Grafton™ Strips

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Size (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T4225</td>
<td>1mm x 10cm (2)</td>
</tr>
<tr>
<td>T42280</td>
<td>1mm x 20cm (2)</td>
</tr>
</tbody>
</table>

Grafton™ Strips

- Data
- Fibers
- Forms

Medtronic

Medtronic Sofamor Danek USA, Inc.
1800 Pyramid Place
Memphis, TN 38132
(800) 876-3133
Customer Service: (800) 933-2635
medtronic.com
Step 1
Prepared Fusion Bed

Placed pedicle screws at appropriate levels. Burred and rongeured the facet joints so they were free of cartilage.

Step 2
Decortication

Decorticated the lamina and spinous processes at all levels to be fused.

Step 3
Placed Grafton® Strips

Placed and manipulated rods per appropriate surgical technique. This case used one 10cm and one 20cm Grafton® Strip, overlapped in a longitudinal position, on each side of the spine between the spinous process and pedicle screws.

CASE OVERVIEW

- 14-year-old female, 50° right thoracic adolescent idiopathic scoliosis and 45° lumbar curve, Risser 2.
- Marked waist asymmetry and significant lumbar rotation on forward bending that do not resolve in prone position.
- T3-L3 posterior fusion, pedicle screw instrumentation, and Grafton® Strips.
- As described by Dr. Randal Betz, MD; Philadelphia, Pennsylvania

As described by Dr. Randal Betz, MD; Philadelphia, Pennsylvania

CASE TECHNIQUE

- Facet joints burred and rongeured. Lamina decorticated with a burr.
- 10cm and 20cm Grafton® Strips placed between spinous process and pedicle screw.

Preoperative Radiograph
Placement of Grafton® Strips

Preoperative Radiograph
Placement of Grafton® Strips