SMTL Dressings Datacard

Product Name:	**ORTHOFLEX**
Classification Name:	**Bandage Plaster of Paris Elasticated**
Manufacturer:	**Johnson & Johnson Medical Ltd**

Description

Orthoflex consists of an elasticated gauze fabric that is coated with a blend of the alpha and beta forms of calcium sulphate hemihydrate (plaster of Paris), together with binders and accelerators which hold the fabric in a slightly pre-tensioned condition. When the bandage is dipped into water, the tension is released and the elasticity that is inherent in the bandage ensures the formation of a close-fitting cast. Orthoflex can be used on its own or as the first layer in the production of a standard plaster of Paris cast.

The bandage is supplied wrapped around a plastic spool which allows rapid, even wetting of the plaster mass upon immersion. Once wet, the calcium sulphate hemihydrate is converted to the dihydrate, and the bandage sets to form a hard rigid structure, which is both porous and absorbent. The rate of setting is largely governed by the temperature of the water, but if the bandage is used in accordance with the manufacturer's instructions, an initial set will take place in about two minutes. After about 3-5 minutes, the cast should be fully set - although it may not achieve its maximum strength and become weight-bearing for up to 24-48 hours, depending upon its thickness. The principal disadvantages of Orthoflex lie in its weight, its opacity to X-rays, and its susceptibility to damage by moisture.

Indications

Orthoflex may be used for most orthopaedic applications, and other situations in which rigid immobilisation is required, including the management of fresh or unstable fractures[*** linked fr-00 ***]. The enhanced conformability of the material is said to make it particularly suitable for use in mould making, and for holding manipulations and splinting soft tissue repairs.

Method of use

Orthoflex should be applied over a layer of stockinette and orthopaedic padding. Prior to application, the first 10-15 cm of the bandage should be unrolled to enable the rapid location of the end after dipping. The bandage is held lightly in one hand, and immersed at an angle of 45 ° for 3-5 seconds in water at a temperature of around 29 °C. After removal from the water, any excess liquid is gently squeezed out and the bandage is rolled evenly around the limb, without tension, avoiding the formation of wrinkles. The conformability of the bandage is such that the need for pleats or tucks is reduced. As each successive bandage is applied, it should be constantly moulded and smoothed with wet hands to ensure the formation of a homogeneous cast. Any areas of potential weakness may be strengthened by the addition of five or six layers of bandage, previously formed into a slab.

Warnings

When applying a cast, it is important to ensure that all bony prominences are adequately padded, and operators should take care to ensure that no indentations are made in the soft plaster that could lead to the application of local areas of high pressure and the formation of plaster sores. Rough finishes on the edges of the cast should also be avoided. If the bandage is applied to a fresh fracture[*** linked fr-00 ***], sufficient padding should be used to accommodate any swelling of the limb. This is particularly important in view of the close-fitting nature of casts produced with Orthoflex.

Presentation

Orthoflex is presented as a roll, wrapped around a plastic core, and sealed in a water-resistant pouch.

Storage

The unopened rolls of Orthoflex should be stored in a cool dry atmosphere.

Sizes

4 in × 4 yd

5 in × 5 yd

Revision Details

Revision Author	Dr S. Thomas
Revision No	1.3
Revision date	1997/12/16

Please inform SMTL of any inaccuracies or changes required in this datacard.

Disclaimer

This datacard has been prepared as an aid to contracting for purchasers in the NHS in Wales, and should not be used as a substitute for literature, instructions or training from the manufacturers of the devices.