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## The Use of LIGASANO® white and LIGASANO® green at the Non-chirurgical Treatment of Children with Grave Burns

St. Josef Hospital - Paediatric Clinic, Bochum, Germany

Since 1968 the clinic for paediatrics at the St. Josef Hospital in Bochum/Germany has hospital beds for children with grave burns.

For about 25 years the children's hospital is announced at a central contact point for the procurement of hospital beds for patients with grave burns in Hamburg/Germany. The function of the central contact point is to name the center with available capacities for children with severe burns nearest to the place of accident. Details of transportation and admission are arranged self-dependent between the involved physicians and hospitals.

At the paediatric clinic in Bochum every year 50 to 60 patients were cared stationary. Since 1997 we use LIGASANO® products for the medical care of children with severe burns.

For most of the burns LIGASANO® white is packed and bandaged under sterile conditions directly on the burned area with elastic bandages.



If an air-dressing wound treatment is intended we use LIGASANO® green. The permanently elastic LIGASANO® green is a foamed polyurethane (PUR), nearly completely permeable to air and good permeable to humidity, imaginable as a three-dimensional sieve. Its structure is coarse and its surface is rough. For this LIGASANO® green is not projected for direct contact with wound or skin. For the open wound treatment we place LIGASANO® green on the bed, which is provided with sterile bedclothes and put thereon one sheet of LIGASANO® white.

Before we lie down the little patients we cream them with Lavasept® gel. The open wound treatment is still made only rarely, because the severe burned children would lie in their room alone for 24 hours, wouldn't be mobile and would have an enormous psychological stress. LIGASANO® white is a foamed polyurethane with mixed and fine cell structure, that causes, because of its surface outlines, a mechanical stimulus on the contact surface of the body. At contact with skin or wound an effect favouring the blood flow is created, visible at increased exudation. For this even dry and necrotic tissue is softened. The special cell structure of the actual hydrophobic LIGASANO® white allows an enormous but controlled fluid intake. Surplus exudate including softened necrosis is absorbed without becoming dry. The moist and warm environment of the wound avoids that LIGASANO® white adheres with the wound. Increasing wound exudation in combination with the controlled suction effect causes a promotion of wound cleansing and a reduction of germs.



## How do we use LIGASANO® white?

Initially the wound is cleaned with Octenisept® colourless, to afford a precise inspection of the wound. On all whitish necrotic plaques we apply as a rule once daily 1-2mm thick Iruxol® ointment to promote the enzymatic escharectomy. At all affected areas we apply as an antiseptic agent Lavasept® gel, that is made by our dispensary with a concentration of 2%. Then the wound is covered with LIGASANO® white and fixed with a sterile elastic bandage. We attend for LIGASANO® white has always contact to the wound ground, in order to create the desired mechanical stimulus, that is absolutely felt at the beginning of the treatment. Children often complain about "formication, scratching sensation or itching", that is no more felt after a short time. After a while you can experience a visible increase of wound exudation, connected with the ablation of fibrin and superficial tissue. Afterwards the surgery decides, whether the treatment is continued until its complete healing or if it has to be inter-vented chirurgically.



Indeed LIGASANO® white is available in different sizes, but we prefer sheets with a size of 200x100x2cm, which we cut to fit and sterilise in our own central sterilisation. This procedure has the advantage, that a sterile dressing in an adapted size is always available.

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