

Phototherapy, for jaundice

Country of origin | Vietnam

Primary function | Treatment

Health problem addressed

This device is used to treat hyperbilirubinemia, or jaundice. Approximately 60% of normal newborns become clinically jaundiced during their first week of life. If not treated in time, jaundice can cause severe physical damage to the child. Early recognition and intervention is very important for the success of the therapy.

Disease addressed

Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism.

Technical descriptions

Phototherapy is a non-invasive, simple to use and highly effective solution to jaundice problem. The LED light source emits blue light in the spectrum of 455-475 nm, a range at which the light breaks down the molecule responsible for jaundice (bilirubin) in the neonatal patient's blood. The by-products of the bilirubin are then excreted into the feces and urine of the patient.

Developer's claims of products benefits

The LED light source allows for a low-cost and low-maintenance product. The device can be used in combination with any radiant warmer, infant bed or incubator available on the market. It has two canopies which do not interfere with radiant warmers and provide maximum exposure to the LED light, one of the most important factors for effective therapy. There is no need for horizontal adjustment, which simplifies the use and maintenance.

Operating steps

Plug in the device to the power outlet. Turn on the device by pressing the "On/Off Button". Select the therapy mode (standard or intensive). Place the patient under the light. Make sure that patient wears eye protection. Monitor the patient.

Regulatory status and standards compliance

European Community (CE-mark). EN 60601-1:2006/AC2010, EN 60601-1-2:2007/AC2010, EN 60601-2-50: 2009, EN 60601-1-6:2010.

Use and maintenance

User: Nurse, general physician, specialised physician.

Maintenance/Calibration required: No

Environment of use

Setting: Indoors, primary level (health post, health centre), secondary level (general hospital), tertiary level (specialists hospital)

Facility requirements: Specific ambient temperature and/or humidity range.

Energy requirements: 1m² solar panel or AC power supply for 6 hours.

Product specifications

Weight (kg): 15

Dimensions: 600mm x 500mm x 1550mm

Accessories: Eye Patch

Consumables: None

Lifetime: 5-10 years

In UN catalog: No

Commercial information

Reference price (USD): \$950.00

Year of commercialization: 2016

Number of units distributed: 100- 1000

Software requirements: Proprietary

Model: Colibri Phototherapy

Other features: Reusable (assuming appropriate decontamination and/or other reprocessing between uses); optional 15 hours battery backup.

