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Lucas cpr device

The second generation LUCAS™ 2 builds upon the well-proven LUCAS™ 1 technology, with a change of driving source from pneumatic to electric. LUCAS™ 2 operates for 45 minutes on the latest battery technology (with no test-cycles or reconditioning required) and may also be connected to and operated from electricity wall outlets or car outlets. The battery is neatly integrated in the hood, making LUCAS™ 2 a lightweight and compact device to store and carry. Features & Benefits 100 compressions per minute with a depth of 4-5 cm. 50/50 duty cycle, for compression and decompression. Complete chest recoil before next compression. Tireless - minimizing "no-flow" time. The same quality for all patients and over time, independent of transport conditions, rescuer fatigue, or variability in experience level of the caregiver. Can be applied within seconds and is designed to minimize interruptions of manual CPR during application. Frees up caregivers to focus on other life-saving tasks; ventilation, medication, defibrillation as well as decision making on continued care and therapy. Small and lightweight Back Plate facilitates application in confined spaces. Two compression modes; 30:2 mode or a continuous mode with ventilation alerts. Quieter operation than Lucas 1. Allows access to patient's chest to place defibrillation pads. Smart Restart function allows for an immediate resumption of compression after change of Battery as it remembers the patient settings during 60 seconds. When time is of the essence during cardiac emergencies, healthcare professionals rely on tools that can deliver effective, consistent care. The Lucas Device is one such lifesaving innovation. Designed to provide automated chest compressions, it helps improve patient outcomes during sudden cardiac arrests (SCA). Whether you're training for online ACLS certification, brushing up on the latest BLS algorithms, or simply seeking to improve your skills, understanding the Lucas Device can be vital. This guide explores what the Lucas Device is, its core uses, the benefits it brings to emergency medical care, and the precautions healthcare providers should follow to ensure the safety of both the user and the patient. The Lucas Device is a portable mechanical chest compression system designed to aid in delivering high-quality, uninterrupted compressions to a patient experiencing cardiac arrest. The device stands apart because of its precision and consistent compressions, which align with ACLS guidelines. Its hands-free application frees up healthcare professionals, enabling them to focus on other critical tasks, like ventilating the patient or administering drugs. Key features of the Lucas Device include:Adjustable straps for a secure fit on patients of different sizes. Settings that adjust compression depth and rate according to ACLS standards. Battery-powered operation for portability and use in various environments. The Lucas Device is widely used by various healthcare providers such as:Emergency responders in ambulances for pediatric BLS algorithm adherence. Hospital teams in emergency departments (EDs) and intensive care units (ICUs). Remote healthcare professionals who may need hands-free options in critical situations. When you're preparing for an ACLS certification online or revisiting protocols via BLS certifications, the Lucas Device represents an integral enhancement to emergency care. Here are the top benefits healthcare providers experience when using the device. One of the device's primary advantages is the delivery of uninterrupted, high-quality compressions. Manual chest compressions often vary due to factors like fatigue or stress. The Lucas Device eliminates variability, ensuring the BLS online recertification algorithms are adhered to with precision. For professionals involved in emergency response, providing manual compressions during extended procedures can lead to fatigue. This fatigue impacts performance, making consistent compressions challenging. The Lucas Device relieves caregivers of the physical strain, allowing them to concentrate on other procedures required under online ACLS courses or PALS certifications online. Administering effective CPR in a moving ambulance is often a logistical and physical challenge. The Lucas Device is durable and built to work seamlessly during patient transport, ensuring uninterrupted compressions per the latest online ACLS certification course standards. Each second counts during cardiac emergencies. With its straightforward setup, the Lucas Device enables responders to begin chest compressions almost immediately, aligning with BLS certification near me standards, which stress the importance of immediate action. Protocols included in ACLS renewal courses and ACLS recertification near me programs often highlight the importance of precise chest compressions. The Lucas Device helps medical teams comply with these standards, potentially improving patient outcomes. While the Lucas Device is undoubtedly a game-changer, several important precautions need to be observed to ensure its successful application and the safety of both patients and caregivers. Without proper training, misuse of the Lucas Device can occur. If you're preparing for ACLS BLS recertification online or BLS recert online, it's essential to integrate hands-on sessions with the device as part of your training. Programs for healthcare providers often include modules on ACLS certification renewal and device efficacy. When applying the device, ensure it is properly aligned to the patient's chest. A poorly fitted device could result in ineffective compressions or injuries. This is particularly important for pediatric use, as covered under PALS courses online and the PALS certification guidelines. While the Lucas Device is effective during transport, it's critical to monitor for any shifts or changes in alignment. Proper securing of the device is a standard process in both BLS certification online and practical resuscitation training. Like all medical devices, the Lucas Device requires routine inspection. Ensure the battery is charged and ready to deliver compressions per the standards outlined in best online ACLS recertification or online BLS renewal programs. The Lucas Device is an exceptional aid, but it shouldn't replace human oversight. Skilled healthcare professionals are still needed to assess the patient's overall condition and make critical decisions in real-time. When pursuing ACLS certification online or BLS online recertification, understanding how to integrate tools like the Lucas Device is critical for real-world application. The device amplifies protocol adherence, whether you're focusing on PALS scenarios or adult ACLS recertification near me courses. Practicing with life-saving tools like the Lucas Device bridges the gap between online learning and hands-on patient care. It reinforces the practical application of algorithms and protocols emphasized during certifications. Whether you're gearing up for a certification PALS course, ACLS renewal, or BLS recert online, integrating the Lucas Device into your emergency care repertoire can significantly enhance the quality of care you provide. If you're new to ACLS or BLS certifications or need to renew ACLS online, our Affordable ACLS platform offers comprehensive courses covering devices like the Lucas alongside core protocols. With user-friendly modules, expert guidance, and resources to suit your schedule, we're here to make your learning seamless. Equip yourself with the tools and knowledge to make a difference—start exploring our certification options today. Share — copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt — remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation. No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Home LUCAS 3 CPR Chest Compression System The LUCAS 3 CPR Machine delivers high-quality, consistent chest compressions during cardiac arrest, ensuring effective CPR in even the most challenging environments. Whether used by paramedics, hospital teams or first responders, this life-saving device ensures uninterrupted compressions when manual efforts aren't sustainable. Manual chest compressions are physically demanding for the person delivering them - this system allows rescuers to focus on treating the patient's underlying conditions rather than delivering manual chest compressions or CPR and provides a more efficient use of rescuer's time. The LUCAS 3 has a Wi-Fi connection to the LIFENET System and integration into CODE-STAT™ 11 Data Review Software. It's engineered for performance, reliability and seamless post-event reporting. Key features of the LUCAS 3 CPR Compression System: Adjustable compression rate: Choose from 102, 111 or 120 compressions per minute, with consistent depth between 1.8-2.1 inches (45-53mm) Fully customisable settings: Tailor ventilation alerts, CPR timers (1-15 minutes) and pause intervals to meet local protocols Wi-Fi enabled: Connects to LIFENET for real-time data transmission and post-resuscitation reporting CODE-STAT™ compatible: Easily integrates into existing data review software This device reduces rescuer fatigue, improves compression quality and enables better focus on airway management and medication delivery. LUCAS 3, v 3.1. LIFENET and CODE-STAT are available in major markets. For details on local regulatory status, availability and data connectivity, please contact us. LUCAS 3 - Saving lives is your power Cart subtotal \$100.00 away from free shipping! Device to provide mechanical CPR LUCAS 2 device demonstrated on a mannequin The Lund University Cardiopulmonary Assist System (LUCAS) device provides mechanical chest compressions to patients in cardiac arrest. It is mostly used in emergency medicine as an alternative to manual CPR because it provides consistent compressions at a fixed rate through difficult transport conditions and eliminates the physical strain on the person performing CPR.[1][2][3][4] The first generation of the LUCAS device (released in 2003) was pneumatic, while the second and third generations are battery-operated.[2] After watching paramedics struggling to perform manual CPR on a patient while in the back of a speeding ambulance, Norwegian inventor Willy Vistung came up with the idea for a pneumatic system that could provide automatic, mechanical chest compressions.[2] Cardiothoracic surgeon Stig Steen supported Vistung's idea, and after Vistung's death, Swedish entrepreneur Lars Sunnanväder and Steen developed the final prototype.[2] Steen and his research team did studies at Lund University Hospital, and in 2000, Steen began using it clinically.[2] In 2003, Swedish ambulances began using the first generation of the LUCAS device, which was driven pneumatically.[2] In 2009, the second generation LUCAS, which had both pneumatic and battery-driven configurations, was released worldwide.[2][5] In 2016, the most recent generation, LUCAS 3, became commercially available.[2] The LUCAS can be used both in and out of the hospital setting.[6][7] The 2015 European Resuscitation Council Guidelines for Resuscitation does not recommend using mechanical chest compression on a routine basis, but it is a good alternative for situations where it may be difficult or to maintain continuous high-quality compressions, or when it may be too strenuous on the medic to do so.[8] However, more ambulance services have integrated it into their ACLS protocols, usually recommending the application of the LUCAS after roughly 15 minutes of CPR by first responders without success. To place the device on the patient, the medic first places the back plate under the patient.[6] This eliminates the "mattress effect" and ensures the device stays in place. Next, the medic attaches the upper part of the device by locking the support legs onto the sides of the back board.[6] Once everything is lined up correctly, the medic can place the suction cup over the patient's chest and turn it on.[6] Finally, the medic will buckle the stabilization strap around the back of the patient's neck and secure their wrists to the device to make transport easier.[6] The LUCAS can be set to different rates and compression modes depending on what the patient's situation requires.[6] When in transport via ground ambulance, even experienced resuscitators can struggle to maintain effective compressions with minimal interruptions.[9] The LUCAS device delivers high-quality compressions at a continuous rate, while up to a third of manual compressions can be incorrect.[9] In 2013, a 68-year-old male made a complete recovery, including no intellectual or neurological deficits, after an out-of-hospital cardiac arrest after 59 minutes of mechanical compressions on a LUCAS device.[10] Patients who experience an out-of-hospital cardiac arrest do not have a significantly higher chance of return of spontaneous circulation (ROSC) with a LUCAS device (33.3%) versus manual CPR (33.0%).[11] There is not a significant difference in those who survive to hospital admission, either: 22.7% survival rate for the LUCAS group versus 24.3% for the manual group.[11] ^ Rehatschek G, Muench M, Schenk I, Dittrich W, Schewe JC, Dirck C, Hering R. 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PMID 24238746. ^ a b Liu, Mao; Shuai, Zhuang; Ai, Jiao; Tang, Kai; Liu, Hui; Zheng, Jiankang; Gou, Junqi; Lv, Zhan (2019-11-01). "Mechanical chest compression with LUCAS device does not improve clinical outcome in out-of-hospital cardiac arrest patients". *Medicine.* 98 (44): e17550. doi:10.1097/MD.00000000000017550. ISSN 0025-7974. PMC 6946388. PMID 31689757. Retrieved from "The LUCAS 3.1 Chest Compression System sets the standard for mechanical CPR devices. Get better patient outcomes and make responder resources more efficient with the LUCAS Chest Compression System. This LUCAS chest compression machine delivers high-quality compressions with fewer interruptions than manual CPR. This enables rescuers to focus on treating the patient's underlying conditions without the fatigue of manual chest compressions or CPR. Having a device that automatically delivers chest compressions, means a more efficient use of rescue staff time, as usually teams of two must cycle between rounds of CPR if done over longer periods. The LUCAS 3.1 even allows for adjustable compression rates at the touch of a button, in compliance with the Resuscitation Council UK's guidelines of over 100 compressions per minute. Plus, a post-event report records all compression rates, depth, and duration for complete transparency. Included with the LUCAS 3.1 device is the carry case, enabling rescue staff to transport the machine over rugged terrain easily. For all enquiries about the Stryker Lucas 3.1 Chest Compression System, please contact us on 01298 872 186 or use the web chat to speak with one of our Specialists. 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Levy M, Yost D, Walker R, et al., A quality improvement initiative to optimize use of a mechanical chest compression device within a high-performance CPR approach to out-of-hospital cardiac arrest resuscitation. *Resuscitation.* 2015;92:32-37 The LUCAS delivers high-quality compressions with fewer interruptions than manual CPR, allowing rescuers to focus on treating the underlying conditions of the patient without the fatigue of manual chest compressions. What's Included 1 x Lucas 3 Chest Compression System 1 x Lucas 3 Chest Compression System Dark Grey Battery 1 x Lucas 3 Chest Compression System Hard Shell Carry Case 1 x Patient Strap 1 x Stabilisation Strap 2 x Suction Cups 1 x Instructions More Information For further information about this product, get in touch with a member of our team on 0161 776 7422.

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