# Wearable Surgical Lighting System Effectiveness of Cosmetic Surgery

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Since its establishment in 1989, Kyoritsu Cosmetic Surgery Clinic, renowned for its advanced techniques and exemplary hospitality, has expanded to 26 clinics nationwide. Dr. Namikawa, the General Manager, underscores the importance of "alternative light sources to surgical lighting" in surgeries involving diverse areas, particularly those concerning bones. He elucidated the rationale and practical user insights behind the adoption of the wearable surgical lighting system, OPELAII, as opposed to traditional type of headlight.



#### Unprecedented Stability Facilitates Fatigue-Free Experience Even During Extended Usage

Cosmetic surgery encompasses a broad spectrum of procedures. While surgeries on the body surface can often be adequately conducted under ceiling-mounted surgical lights, procedures involving bones, such as osteotomy and contouring, frequently suffer from inadequate brightness due to the necessity of operating through small incisions. Thus, a headlight becomes indispensable. However, conventional headlights tend to shift or induce headaches when tightly fastened for prolonged periods, resulting in a somewhat arduous user experience necessitating removal and reattachment. It was in this context that I came across the catalog of OPELA III and decided to give it a try.

Upon actual testing, I discovered that it securely covers the head without shifting even during prolonged usage. Though it carries some weight, it distributes it evenly rather than concentrating it on a single point, resulting in stability without significant perceived heaviness and discomfort. Overall, it left an impression of being a comfortable headlight with a secure fit throughout the surgery (Fig.1).

While OPELAII may not be particularly lightweight compared to other

products, there is a subjective sense of reduced fatigue compared to using other lightweight and affordable alternatives during surgeries lasting over three hours. It's a peculiar phenomenon, but this high level of stability truly demonstrates its value during lengthy surgeries. It might be advisable for users to wear it for a considerable duration when initially trying it out.



Fig.1 | Dr. Namikawa wearing OPELAIII. There is less fatigue than it appears.

#### Resembling Hues of Natural Light, Various Shades Of Tissue Color Are Vividly Recognizable

Illuminating the surgical field goes beyond mere brightness; surgeries cannot progress unless blood and various tissues can be clearly distinguished. Perhaps owing to its resemblance to natural light in color, the illumination from OPELAIII enhances contrast and shadows in a world dominated by red surgical fields, enabling the identification of fine details previously overlooked (Fig.2).

The ease of tissue identification in the surgical field significantly contributes to safer surgeries. Specifically, in procedures like mandibular angle reduction (jaw contouring), where the jawline is often difficult to discern from inside the mouth, I observed clear visibility of even the finest details of the mandibular angle when viewed from the usually obscure underside. The protrusions and curves of bones appear more graphic, enhancing visual recognition. Additionally, during reduction of mandibular bone, the course of the inferior alveolar nerve becomes a significant concern. While I preserve the nerve by



Fig.2 | Vivid contrasts of colors and shades allow to easily distinguish various tissues.

## Effectiveness of □□□□□ ► Ⅲ<sup>™</sup> vol.9

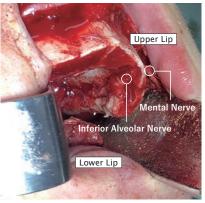
## **Cosmetic Surgery**

approaching it from both the front and back sides during reduction, the nerve inside the mandibular canal is exceptionally visible (Fig.3). Not only is it visible, but also the texture or the condition around the nerve can be identified, making it easier to predict its position which helps significantly reduce the risk of nerve damage.

While some surgeons may suggest not obsessing over minor imperfections, as they might not be visible to the patient directly, I believe it is essential to avoid compromising on such details, as they contribute to overall quality of surgery. The smoothness of the resected surface after reduction, for instance, might not seem crucial since it will be buried within soft tissues, but avoiding compromise ensures a higher level of workmanship. As a specialist, it is crucial to engrave in one's mind that only through such meticulous attention to detail that one elevates their practice, and I am committed to pursuing perfection in my work. This embodies a sense of professional pride for a

physician, reflecting our dedication to excellence.

Fig.3 | Overhead view of the mandibular bone's surface. The nerve inside the mandibular canal is clearly visible. -



### Once You've Experienced Its Benefits, There's No Turning Back: An Essential Item Recommended For Cosmetic Surgeons

Certainly, conventional headlights suffice for surgeries. Yet, once you've encountered tools offering superior visibility, you're immersed in an environment where surgeries are not only safer but also of heightened quality, making it hard to revert. It's akin to the disparity between a smartphone camera and a digital single-lens reflex camera. While the former captures decent photos, the latter boasts remarkable color accuracy and intricacy, particularly ideal for product Having spent three decades refining bone structures, I acknowledge considerable improvement in my competence level over time, yet I persist in honing my skills. I aim to conduct surgeries with a mindset of continuous improvement, meticulously attending to even the unseen elements. I actively endorse tools that facilitate this goal. Cosmetic surgeons aspiring for excellence with such determination should undoubtedly consider giving OPELA III a try (Fig.4).

photography, wouldn't you agree? OPELA III diminishes the reddish hue, imparting a gentle effect on the eyes with its resemblance to natural light in color. It evokes a sense of overall surgical enhancement. With its stable fit and superior comfort, surgeries can proceed seamlessly, alleviating stress with improved visibility. Despite OPELA III's initial costliness, my decision to invest in it was swift, recognizing that stress-free surgeries foster safety and excellence. (Presently, I utilize OPELA III for all osteotomy and contouring cases.)



Fig.4 | Dr. Namikawa holding OPELAIII, hailing it as "an indispensable gem of a tool for surgeries."



Fig.5 | Enhancing surgical lighting environment through integration of OPELAIII with older model halogen ceiling-mounted surgical lights.

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