# Lethal Anaesthesia: Infamous deaths from the history of the profession

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### **SASA Registrar Communication Prize**

"How wonderful is Death, Death, and his brother Sleep!" Percy Bysshe Shelley

Everyday our patients walk the fine line between sleep, anaesthesia and death. According to the WHO webpage avoidable surgical complications still account for a large proportion of preventable deaths globally. Despite dramatic improvements in surgical safety knowledge, studies in developing countries suggest a death rate of 5–10% associated with major surgery. The rate of mortality during general anaesthesia is reported to be as high as 1 in 150 in parts of sub-Saharan Africa. The history of our profession reads like a great morbidity and mortality review. To this day, surgery is still not safe. This presentation remembers four stories of lethal anaesthesia from different periods in the history.

The first recorded death attributed to anaesthesia was that of Hannah Greener, a healthy 15-year old. She died in 1848 in the UK, after receiving chloroform for the removal of a toenail. Careless administration of anaesthetic agents was common at the time.

The death that gave us *1984*... George Orwell's wife, Eileen passed away shortly after induction of a general anaesthetic for hysterectomy in 1945. Orwell finished his famous book in the aftermath of Eileen's death by July 1948, resulting in the title *1984*. She was one more example of the tragic state of healthcare during times of war.

The death that never happened... Dr Elizabeth Gibbs lived the worst nightmare of any registrar for anaesthesia. Unprepared and unsupported she singlehandedly managed the first liver transplant at Cambridge in June 1967. The patient passed away, but most unsettling is that all of the case records have disappeared.

Murder and suicide... The history of anaesthesia is incomplete without mention of intentional harm done. Nurse and serial killer, Genene Jones was thought to have killed or harmed upwards of fifty babies and children while she worked at the San Antonio, Texas hospital in the 1980s.

Dangerous anaesthesia is a significant public health concern. In remembering these tragic stories we get some perspective as to the necessity of the WHO's The Safe Surgery Saves Lives Challenge. In anaesthesia there is no single remedy that would change safety. It requires "the reliable execution of multiple necessary steps in care." The first step is respect. Respect for history. Respect for science, for the patient, for record keeping. Respect for Death, the brother of Sleep.

# Microorganisms cultured from laryngoscope blades in an academic hospital following implementation of a new decontamination technique

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### **The Gaisford Harrison Registrar Research Prize**

**Background:** Laryngoscopy is a commonly performed invasive procedure in hospitals, especially in theatre. Lack of formal guidelines and variation of utilised decontamination techniques have resulted in a breach of ensuring patient safety in hospitals. Multiple international and local studies have found microorganism contamination of laryngoscope blades.

Aim: The aim of this study was to describe the effectiveness of a newly implemented decontamination protocol for reusable laryngoscope blades at Helen Joseph Hospital.

**Method:** A prospective, contextual, comparative, descriptive study design was used. A single area on the size 4 blades in the two emergency theatres was swabbed in an aseptic manner. After transport to the laboratory, the samples were inoculated onto petri film and blood agar plates. Following 48 hours of aerobic incubation, plates were examined for colonies with subsequent enumeration and identification of microorganisms. The samples were collected over a two month period.

**Results:** Five control samples were collected, all of which had no microorganism growth. Of the 73 samples collected, four samples were misplaced by the laboratory with no results recovered. Positive quantitative counts were reported on eight (11.6%) samples, with only two (2.9%) samples having positive microorganism growth and identification and 67 (97.1%) samples reporting no microorganism growth. The two microorganisms isolated were *Chryseobacterium indologenes* and *Streptococcus salivarius*. This shows the effectiveness of the new decontamination technique, with a p-value < 0.0001.

**Conclusion:** The reduction in positive microorganism contamination by high-level disinfection with Cidex<sup>®</sup> OPA will improve patient safety and decrease the potential risk of cross infection. Formal decontamination protocols using a high-level disinfectant should be implemented at all hospitals.