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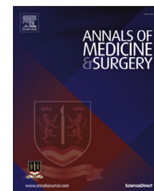

Commentary

# Conquering the deadly stroke: Perspective on a surgeon's odyssey

Bibek Aryal [a, *], Teruo Komokata [b, **], Yutaka Imoto [a]

[a] Cardiovascular and Gastroenterological Surgery, Graduate School of Medical and Dental Sciences, Kagoshima University, Kagoshima, Japan
[b] Department of Surgery, Kagoshima Medical Center, National Hospital Organization, Kagoshima, Japan

## HIGHLIGHTS

- An odyssey of a Japanese surgeon, who survived a life-threatening hemorrhagic stroke.
- Self-motivation and adherence to work ethics displayed by the surgeon to return to work is admirable.
- Passion is a detrimental factor that enables surgeons to overcome a roadblock to their career.

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A Surgeon's career flourishes from challenges. The career develops at the verge of high workload-related stress and frequent exhaustion, resulting to a vulnerable and sensitive attitude towards their profession. Serious morbidity like stroke that causes physical or psychological impairments easily halts a surgeon's career. This report recounts the journey of a Japanese surgeon who survived a high-grade hemorrhagic stroke and returned back to his career with renewed and indeed more dynamic participation.

The story begins when Dr. Teruo Komokata, a 50-year-old surgeon, actively working as the chief of hepato-biliary-pancreatic surgery unit at a national university on a southern island of Japan, suddenly collapses with an episode of seizure. He was immediately transferred to the university hospital and a subsequent computed tomography scan showed bilateral aneurysms of the middle cerebral artery; one of the two had ruptured with massive hemorrhage. A diagnosis of subarachnoid hemorrhage (SAH) was made (Hunt and Hess, Grade 5) [1]. Surgical clipping of the ruptured aneurysm was performed on the following day. The other silent aneurysm was surgically clipped a month later. He underwent rehabilitation and was discharged from the hospital nearly two months after admission.

Disability following stroke leads to participation restrictions in complex and routine activities. Being his junior fellow, I was concerned about his return to work (RTW). There was no obvious physical disability, and given the severity, grade-5 SAH holds only ten percent survival rate [1], he was returning home with the best-expected outcome. Recovery from a high-grade stroke is itself a long hurdle, and the resulting impairments tend to become more serious depending on the severity. A month later, he developed post-stroke depression that made him consider retiring from his career as a surgeon. During his recovery, I started collecting information on RTW after severe stroke in sensitive professions like a surgeon. Owing to the severity of the stroke, his physical and psychological well-being would be the priority; concerns about his career and RTW were secondary.

A few weeks later, I caught Dr. Komokata practicing surgical knot tying; a training suture set was lying beside him. To my curiosity, he responded that the hospital provided basic rehabilitation and he was now rehabilitating himself to save his career. With the growing optimism towards his career, he was moving to post-stroke psychological well-being. To achieve his goal, he made himself follow a physical and mental conditioning regimen designed to regain the pre-stroke level of his career skills. His self-rehabilitation program was not limited to regaining the surgical skills, but also included sports, driving lessons and other routine activities. Every other time I met him, I found an added overwhelming zest to get back to his career.

Shortly after the self-rehabilitation, he started visiting the university and affiliated hospitals and spent hours observing operations. During this early period, he was not given any direct

* Corresponding author. Cardiovascular and Gastroenterological Surgery, Graduate School of Medical and Dental Sciences, Kagoshima University, 8-35-1, Sakuragaoka, Kagoshima, 890-8520, Japan.
** Corresponding author. Department of Surgery, Kagoshima Medical Center, National Hospital Organization, 8-1 Shiroyamacho, Kagoshima-shi, Kagoshima, 892-0853, Japan.
*E-mail addresses:* drbibekaryal@gmail.com (B. Aryal), komokata@kagomc2.hosp.go.jp (T. Komokata).

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responsibility, but was served with all the opportunities to fix the way back to his career. No concrete evidence suggests when someone is ready to RTW post-stroke; decisions are made on an individual basis. Critically, the consequences could be more severe if his return turned out to be premature and the true impact of stroke on his job would be realized later like several other survivors [2]. On the better aspect, his desire to RTW as a surgeon was deeply adhered to his work ethics. He kept himself confined for months. He seemed blissful and content, but was still yearning to hold the scalpel, transect the liver parenchyma, resect the tumor and so on.

Finally, he reached to the time point to make a critical decision when to resume his work. He designed a self-assessment protocol in specific domains of regained skills and emotion cognition interface, and launched it by assisting his fellow colleagues at the affiliated hospitals beginning from minor to high-grade gastrointestinal procedures. He next had another giant step, being a supervisor to his junior colleagues in various procedures. His performance curve was exemplary exponential. To my consistent surprise, he then started operating himself, and at 8-month post stroke, he performed a successful pancreaticoduodenectomy as a major gastrointestinal procedure. No disparity was noted in his performance compared to the pre-stroke level, this revitalized him in building the self-reliance.

Dr. Komokata's next venture began in a tertiary care center on the same island, based on the national hospital organization of Japan. In a year, he was conferred leading roles as the chief of surgery and director of residency program. His responsibilities were segmented by time devoted to academic activities of resident doctors and routine clinical services. I would better entitle him an academic surgeon; he consistently contributed scientific publications and kept on participating actively in national and international scientific congresses. In another episode, during his visit to the annual meeting of American Hepato-Pancreato-Biliary Association, professor Michael L. Kendrick's talk on laparoscopic surgery kindled another spark of passion. His dedication to his career could be seen again when he was awarded with an accreditation of a board-certified laparoscopic surgeon, which few surgeons in Japan are able to achieve. He employed a great array of minimal invasive procedures in hepato-biliary-pancreatic surgery demonstrating that complex laparoscopic procedures are feasible in municipality level hospitals, which are relatively less sophisticated. Operating more than 400 cases annually, he is now 56 and is working with the same devotion. Equally interested in global health, he shares his desire to support Southeast Asian countries in upgrading hepato-biliary-pancreatic surgery.

This chronicle of astonishing events doesn't limit to a person whose story has just been told. The passionate team of neurosurgeons delivered excellent treatment leading to an outcome to unpredicted level. The glory should also be shared with the professor (the chairman) of his department, for his visionary solutions in reestablishing the post-stroke career. He adds that the high level of emotional supports received from his gracious wife and three adorable children substantially enhanced the healing effect. As a further testament to Dr. Komokata, he always presented with joy, humor, kindness and empathy to his colleagues and patients, and always shared the pride of accomplishment with his entire team.

With the surge in modern medicine, the archetypal experience of stroke survivors has been effectively redressed. Unfortunately, only half of these patients are reported to RTW, although they are physically capable of doing so [3]. Quite clearly, one's actual functional ability is not always decisive; survivors' self-image and self-perception are vital in whether or not a person will bounce back from stroke and RTW.

Being a surgeon is a divine transformation owing to boundless study, lengthy observation, scrupulous training, and arduous practice. Despite magnificent professional and personal achievements, at some point the career encounters severe pressures frequently leading to personal distress, career dissatisfaction, personal crisis, and burn out. However, it wouldn't be merely a fantasy to suggest that surgeons are born with an ironclad of ‘passion’ that sustains them through the difficult phases, and even enables them to conquer the debilitating conditions like a deadly stroke.

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## Author contribution

All the three authors substantially contributed to effectively construct the article [BA, YI: witnessed the events, prepared the plot; TK: the main character of the article, shared his personal experiences and approved the writing of the paper.]

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None.

## Guarantor

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## References

[1] W.E. Hunt, R.M. Hess, Surgical risk as related to time of intervention in the repair of intracranial aneurysms, J. Neurosurg. 28 (1) (1968) 14–20.
[2] C. Coole, K. Radford, M. Grant, J. Terry, Returning to work after stroke: perspectives of employer stakeholders, a qualitative study, J. Occup. Rehabil. 23 (2013) 406.
[3] R. Morris, The psychology of stroke in young adults: the roles of service provision and return to work, Stroke Res. Treat. 2011 (2011) 534812.