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EXPERIENCE DOES MATTER FOR PULMONARY ENDARTERECTOMY SURGERY

To the Editor:

I have read the article entitled “Is Subdural Hemorrhage After Pulmonary Endarterectomy Underrecognized?” by Yap and colleagues.¹ I want to congratulate the authors for this article and starting a pulmonary endarterectomy (PEA) program in Singapore, and make some contributions.

In the article, it has been reported that 6 of 10 patients had subdural hemorrhage (SDH) after PEA for chronic thromboembolic pulmonary hypertension. The authors concluded that in their small cohort of patients, a higher incidence of SDH was encountered. As one of the reasons for this high incidence of SDH, the authors claimed that Asians are known to be at a higher risk of intracranial hemorrhage compared with their Western counterparts.

PEA is a complex procedure that can be safely performed only in expert centers based on a high level of experience of an interdisciplinary team.² It is also well established that a major prognostic factor for PEA surgery is the experience of the surgeon and the institution. A PEA center is defined as an institution that performs 20 or more PEA surgeries per year with a mortality rate less than 10%.² At the Sixth World Symposium on Pulmonary Hypertension in Nice, February 27 to March 1, 2018, an expert center was defined as a center that performs more than 50 PEA cases per year. Increasing surgical experience, technical refinements, and better patient selection probably explain the improvements in perioperative mortality during the past 20 years.

It is well known that deep hypothermic circulatory arrest (DHCA) is the optimum modality for patients undergoing PEA surgery. In our early PEA experience, mean DHCA time was 21.4 ± 7.2 minutes for PEA surgery³; however, Yap and colleagues¹ reported their DHCA time as 46 ± 15 minutes. I think this time is too long for an initial



experience of PEA surgery, and it may contribute to this higher incidence of SDH. Ever since we started our PEA program with acceptable results,³ more than 500 operations have been performed over 7 years (80 cases last year), with increased institutional and surgical experience resulting in our center becoming the only expert PEA center in Turkey. With this experience, we did not encounter any SDH or other serious neurologic complications regarding to PEA surgery, although our center is aware of postoperative neurologic complications of cardiothoracic surgery.⁴

Although I could not read the editorial comment about the article, this early experience of Yap and colleagues¹ highlights the importance of an expert chronic thromboembolic pulmonary hypertension team within a high-volume center to overcome intraoperative and early postoperative complications.

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LOOK BEFORE YOU LEAP

Reply to the Editor:

In Zen teachings, the term *mushin* reflects a state of mind that is undisturbed by thought, emotion, or judgment. This state of mind allows one to act in a fashion that is free of obstructive thought processes and emotions. It is challenging to achieve *mushin*, but doing so allows one to be more reflective and to be less prone to jumping to conclusions.

In the commentary in the *Journal* entitled, “Experience Does Matter for Pulmonary Endarterectomy Surgery,” Yıldızeli¹ suggests that the increased incidence of subdural hemorrhage (SDH) found in the cohort of patients undergoing pulmonary endarterectomy (PEA) for chronic

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