# Arrogance

- Hubris syndrome in neurosurgery
- Neurosurgery: A legacy of excellence
- Michael Servetus (1511-1553): physician and heretic who described the pulmonary circulation
- Neurosurgical education: the "other" competencies. The 2003 presidential address
- Arrogant neurosugeons and knowledgeable radiologists
- Political arrogance

Neurosurgery requires certain personality traits to provide the best possible outcomes for patients. This stems from the fact that neurosurgery is one of the most complex forms of surgery and therefore demands a high level of skill, precision, confidence, and leadership capabilities. However, certain personalities and associated attitudes may be harmful to patients and could result in inferior outcomes. The belief that certain personality traits could result in potentially dangerous outcomes was first recognized in aviation, as ‘‘Arrogance got more pilots in trouble than faulty equipment” [1)].

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Hubris syndrome (HS) is an acquired psychiatric disorder that affects people who exercise power in any of its forms. It has been reported in many fields, from politics to finance. The physician-patient relationship is also one of power. A lack of humbleness and empathy in this situation can lead to qualities such as self-confidence and self-assurance becoming pride, arrogance and high-handedness, which characterize a doctor suffering from HS.

Identifying the symptoms of HS in the medical setting makes it easier to diagnose and to help healthcare organizations anticipate and mitigate its consequences.

The diagnostic criteria for HS initially reported in political leaders with government responsibilities are analyzed and transferred to the medical field of neurosurgery. Two forms of medical HS are described and ten diagnostic criteria are proposed that are valid for any physician-patient relationship.

HS is an acquired psychiatric disorder that is triggered by power and enhanced by success, and can easily be observed on a daily basis in physicians working in settings that are very close to us. Early identification of these medical behaviors is necessary to be able to mitigate their consequences [2)]

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Neurosurgeons are often identified with traits such as arrogance and hubris. However, the true legacy of neurosurgeons is excellence. Harvey Cushing, the pioneering neurosurgeon of the United States, is largely responsible for this legacy of excellence. Eminent personalities have agreed that sincere and hard work is necessary to achieve excellence. Excellence in neurosurgery in the domains of surgical work and research will be discussed in the article. Excellence in surgical work should be measured comprehensively and over long follow-up periods using tools such as functional outcomes and quality of life instruments besides morbidity and mortality. For excellence in neurosurgical research, one can use the help of indices such as the h-index and i10 index. No single measure, whether for surgical excellence or excellence in research, however, incorporates a measure of qualities such as empathy, integrity and mentorship. These intangible qualities should be an integral part of the assessment of a neurosurgeon and his/her work. Cushing's attributes of meticulous record keeping, attention to detail, and maximal utilization of opportunities should guide us in our pursuit of excellence. In recent years, it has been suggested that excellence is not the result of an innate talent but can be aspired to by

anyone willing to adopt a work ethic that involves several hours of “deliberate practice,” feedback and passion. Neurosurgeons should continue to pursue the legacy of Cushing especially in present times when medical professionals are frequently depicted as being driven more by avarice than by Hippocratic principles [3].

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In his 2003 Presidential Address to the American Association of Neurological Surgeons, Dr. Heros discusses his personal additions to the six basic competencies for which all neurosurgical residents must be tested. The basic competencies are as follows: 1) patient care; 2) medical knowledge; 3) practice-based learning and improvement; 4) interpersonal and communication skills; 5) professionalism; and 6) system-based practice. To these, Dr. Heros proposes to add six supplemental competencies: 1) intellectual honesty, which involves frank discussions about patient complications and admissions of the physician's frailties; 2) scholarship–the art and science of medicine, which recognizes the value of evidence-based medicine but does not discount knowledge derived from experience; 3) practicing in a hyperlegalistic society, which involves tailoring informed consent to fit individual patients' circumstances; 4) time- and cost-efficient practices, in which the physician strives to conserve time and resources by forgoing testing that is not strictly necessary, doing only what is needed to return patients to wellness; 5) approach to patients, which entails acknowledging and respecting the dignity of all patients; and 6) pride in being a neurosurgeon, which carries a sense of elitism without arrogance [4].

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Yeager C, Janos L. Yeager. New York, NY, USA: Bantam; 1985
2)
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3)
Rajshekhar V. Neurosurgery: A legacy of excellence. Neurol India. 2015 Jul-Aug;63(4):468-75. doi: 10.4103/0028-3886.161966. PubMed PMID: 26238874.
4)
Heros RC. Neurosurgical education: the “other” competencies. The 2003 presidential address. J Neurosurg. 2003 Oct;99(4):623-9. PubMed PMID: 14567595.