BRAIN DEATH IN ASIA - ACCEPTED FACT BUT STILL NO UNIFORM CERTIFYING CRITERIA

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Introduction: Asia is the largest and most populous continent in the world with people from many diverse ethnic groups, religions and government systems. Although the concept of brain death is accepted in many Asian countries, its implementation and practice have been quite varied.

Methods: A literature review was conducted through both a PUBMED and GOOGLE search to identify relevant articles and publications using the search words: brain death, transplantation, and Asia from 1970 to 2014. In addition, through contacts of the two authors of this paper, a survey with questions about brain death practices and guidelines, was sent to as many countries as we were able to contact.

Results: There is wide variability in the criteria for certification. While most countries have adopted the 'whole brain' concept of brain death, most countries with past colonial links to the United Kingdom follow the UK 'brainstem' concept of brain death. Despite this difference most countries require only neurological testing of irreversible coma and absent brainstem reflexes as criteria for certification of brain death. Differences exists in the number of personnel required, qualification of certifying doctors, need for repeat examination, minimum time interval between examinations, and the requirement for and choice of confirmatory tests. Not all countries require testing of all 7 brainstem tests. The $PaCO_2$ threshold required for apnea testing varies, with most countries adopting a threshold of ≥ 60 mmHg or increase of ≥ 20 mmHg above the baseline.

Conclusion: These differences reflect the lack of scientific evidence to support a standard criteria in the certification of brain death.