

## Ariel Sharon's Illness: Should We Dedicate a Medical Journal Issue to a Single Case Study?

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On 18 December 2005, Israel's prime minister was admitted to the Hadassah Medical Center in Jerusalem with sudden-onset aphasia and was diagnosed as suffering from a cerebral embolic event. The medical information quoted below was released by the hospital spokespersons and appeared in the media as well as in medical journals.

The MRI revealed a small left cortical ischemic lesion and old microbleeds. A transesophageal echocardiogram showed a significant patent foramen ovale with atrial septal aneurysm and a spontaneous right-to-left shunt. The ascending aorta and the aortic arch were normal. Mr. Sharon did not have the common vascular risk factors such as diabetes, hypercholesterolemia and hypertension, and he did not smoke. Considering the risks of a recurrent embolic stroke on the one hand and those of cerebral hemorrhage on the other, Mr. Sharon's physicians decided to treat him with low molecular weight heparin with Factor Xa monitoring for a limited time period, to close the PFO as soon as possible after the acute cerebral event and to switch thereafter to antiplatelet therapy. Unfortunately, 2 weeks later, the Prime Minister suffered an extensive hemorrhagic stroke. He received treatment with Factor VIIa and underwent emergency decompressive craniectomy and partial removal of the hematoma. Although this most probably saved his life, he remained in a vegetative state and was recently transferred to a rehabilitation center [1].

Due to Mr. Sharon's prominent national and international position and the probable consequences of his medical condition for the political situation in Israel and probably for the entire Middle East, his medical condition led to a great many medical and non-medical questions raised by the public, the media and the medical community [2].

The medical questions included the following: What is the role of anticoagulants in the prevention of cardioembolic cerebral events? What is the significance of a PFO in advanced age as a risk factor for a cerebral cardioembolic event? Should we look routinely for microbleeds before starting anticoagulant therapy? Is the MRI finding of microbleeds, which are compatible with cerebral amyloid angiopathy, a contraindication to anticoagula-

tion? What is the role of surgery in extensive cerebral hemorrhage? What is the appropriate treatment of prolonged vegetative state?

Sharon's condition also raised other important non-medical issues: Who is responsible for the medical care of political leaders? What is the right balance between political leaders' privacy of medical information and the "public's right to know"? What is the role of the media in such an event, and what are the mutual expectations between the media and the treating physicians?

Another question that relates to the media-physician inter-relationship that arose in the medical community concerns the role of medical interpretations and criticism voiced by non-treating medical experts in such an event.

Since many of those questions have been dealt with mainly in the media, the editorial board of the *Israel Medical Association Journal* has decided to approach them in a more scientific way and to dedicate a whole issue of the journal to these questions. When I was approached by *IMAJ* to edit the publication I tended to decline the offer. I felt that the issues had already been exhausted. Moreover, we are used to reading special issues of medical journals that are dedicated to the problems surrounding a single pathologic process or even a single disease – not those arising from the treatment of a single patient. But after giving it a second thought I decided that this is actually a reasonable project. There is no doubt that the questions raised surrounding the Prime Minister's illness are important and many of them are controversial. Therefore, dealing with them in a scientific way is justified, and there is no better platform than that of a medical journal. Moreover, there is a clear role for case studies analysis in the toolbox of the medical profession. We use it constantly in everyday departmental staff meetings, and as a basic tool in the training of our medical students. Even in the era of Evidence-Based Medicine it is clear that statistical generalization cannot be applied non-problematically to individual patients in specific contexts, and there is no substitute for decision analysis and expertise in the clinical decisions regarding individual patients presenting a multitude of problems [3]. Therefore, I believe that there is certainly room for case studies analysis and even for a whole publication focusing on a case study.

PFO = patent foramen ovale

We have therefore decided to dedicate this issue of *IMAJ* to the various controversial topics raised surrounding Mr. Sharon's admission to the hospital. The authors were asked, however, to refer to the issues in their fields of expertise without referring directly to the specific details of Mr. Sharon's illness.

The first two sections deal with the non-medical problems surrounding the treatment of political leaders and the relation with the media. Y. Blachar, Chairman of the Israel Medical Association, deals with the role of the medical community in the treatment of political leaders. Y. Donchin of the Hadassah Medical Center recounts the secrecy that surrounds leaders' health in history. N. Dubler and G.E. Kalkut from the Montefiore Health Center, New York, discuss the ethical angle in the treatment of VIPs. A. Reches from the Hadassah Medical Center discusses the balance between the leader's medical privacy and the public's need for transparency. S. Mor-Yosef et al. from the Hadassah Medical Center describe the complicated issues in handling the in-hospital treatment of a political leader from the point of view of a hospital director. G. Weimann and E. Lev from the University of Haifa examine the influence of the media on the public beliefs and attitudes in health-related issues and analyze the reasons for the discrepancy between the medical facts and their media reporting, both from a theoretical perspective as well as from empirical evidence, using as a case study the reporting of cancer in the Israeli media. U. Benziman from the Israeli daily newspaper *Haaretz* deals with the mutual expectations between the media and the health community in such events.

Most of the above contributors feel that there is a clear need to create national tools to solve these difficult questions. I hope that this topic will be deliberated by the Israeli legislature in the near future.

The next two sections deal with the diagnostic and therapeutic problems in the treatment of ischemic strokes. I. Kronzon and his colleagues from New York University describe the role of echocardiography in the evaluation of suspected cardiogenic emboli. L. Caplan from Beth Israel Deaconess Medical Center and Harvard Medical School and B. Gross and Y. Lampl from Western Galilee Hospital discuss in depth the controversies regarding anticoagulant therapy in the prevention and worsening of stroke. A new therapeutic approach to acute ischemic stroke is the recombinant tissue plasminogen activator reperfusion therapy, which was approved in Israel only recently. Yvonne Schwammenthal and her colleagues from Sheba Medical Center report the results of this reperfusion therapy in their facility. And R.R. Leker and his colleagues from Hadassah Medical Center discuss novel therapies for acute ischemic strokes.

The next section deals with the role of PFO in cardioembolic stroke. I. Kronzon and P.A. Tunick from New York University School of Medicine describe the role of echocardiography in the

CAA = cerebral amyloid angiopathy  
ICH = intracellular cerebral hemorrhage

evaluation of PFO. R. Hirsch and J.Y. Streifler from the Rabin Medical Center discuss the controversial issue of PFO as a source of cardioembolic stroke. They try to define what they consider "real" PFO and present their institute's experience with closure of PFO in adults for the prevention of stroke.

Another unsolved question is the appropriate therapeutic approach to intracerebral hemorrhage. D. Soffer from Hadassah Medical Center discusses the pathologic-clinical implications of CAA in intracerebral hemorrhage. N. Da'as and his colleagues from the Hadassah Medical Center and the Sheba Medical Center describe the Israeli experience with recombinant Factor VIIa for rapid reversal of anticoagulant effect in patients with intracranial hemorrhage, and E. Auriel and N. Bornstein from Tel Aviv University describe the therapeutic options in cases of acute cerebral hemorrhage. R. Segal and co-authors from the Hadassah Medical Center summarize their facility's experience with surgery for ICH.

The last section reviews an important topic about which I believe many of us are relatively ignorant – the prognosis and treatment of vegetative states, summarized by B.Z. Krimchansky and team from the Loewenstein Rehabilitation Hospital.

As I previously mentioned, no single analysis, however "evidence-based," can direct us in the treatment of a single patient with a complicated medical condition, but I do believe that this collection of reviews, analyses and clinical studies will take us a step further towards reaching the best possible decisions when treating similar patients.

I would like to emphasize once again that the medical information contained in this issue regarding Mr. Sharon's illness does not include any data that have not already appeared in the media. As a last word for proper disclosure, I should emphasize that I was involved in the treatment of Mr. Sharon in various stages of his illness and I hope that this has not adversely affected my editorial role.

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## References

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