Emergency Medicine Update - July 2004

1. GI bleeding is not really a surgical disease. This is self evident to many American physicians, but in Israel it has yet to catch on. Minor to moderate bleeding is handled by gastroscopy and more extensive bleeding is handled by embolization by radiologists. Indeed, this article (Emerge Clinics of NA Nov 03) makes the important point. GI bleeding went to the surgeons because many years ago this was treated by surgery, but the overwhelming majority of patients today do not go for surgery and most surgeons will finish their training without ever doing a single surgical procedure for GI bleeding.
2. This subject is hot right now. What happens to people who take NSAIDs and have Ischemic heart disease? NSAIDs do inhibit platelets. But much more weakly than aspirin and it is thought that they may block the binding sites for aspirin - a much more effective drug. Still it is not clear (BMJ 6 Dec 03) – but with all the side effects of NSAIDs, we have often recommended in this column that paracetomol should be your first choice. NSAIDs have no advantage of over this drug and the anti inflammatory effect of NSAIDs is probably not of any clinical significance (Prescriber's Newsletter - 2002)
3. Some things in emergency medicine must be done rapidly: we need to get MIs to the cath lab quickly; we need to get CVA patients TPA fast (if you are a believer); we need to start antibiotics in pneumonia quickly. Here is a new one. Cooling the body does help in acute brain injury – but it must take place within two hours. The body should be cooled to 32-34 degrees Celsius. (Lancet 13 Dec 03)
4. If you have reduced an intussusception by barium enema in the emergency department, you can rely on a seven hour observation period and not automatically admit these patients. (Peds Dec 03)
5. There was a recent article in the Annals of Emergency Medicine about how to work up TIA in the Emergency department (May 04) and the controversial issue is the need for an urgent CT. The article in the Annals admitted that the likelihood of finding something was very small but suggested that it be done anyhow for "medicolegal" reasons. The Neurologists themselves say that it will not alter the outcome so my feeling is that the only thing that will change it is making sure the folks are taking aspirin and get them a non- invasive carotid evaluation within twenty four hours. These people are at high risk and the early treatment of carotid stenosis can make a difference (Stroke Dec 03)
6. Ginger has finally been checked as an antiemetic in pregnancy. It is safe but works only mildly. Use 250mg (AJOG Nov 03)
7. Most surgery residents hate trauma patients (at Tel Hashomer one told me that they do not like it because they take so much time to work up and only one in a thousand actually goes to surgery). This article (J Trauma July 03) says that while they make the management of trauma patients more efficient than leaving him/her to a trauma surgeon by himself this does not improve the outcome. I believe that this is a role that emergency physicians need to step into. After all trauma patients are managed in our department. Our particular trauma chief wasn't too interested. I'm not sure why.
8. Do steroids and bronchodilators help in bronchiolitis? The teaching has been no, but some say that just as with cases of asthma, if you start early, before significant mucus plugging occurs, you will succeed. Later they will not help. (J Peds Dec 03)
9. The Brugada brothers have written again (Circ Dec 23/30 03). They mention that in a series of 547 patients there were 156 individuals that had normal EKGs and were only found to have a Brugada pattern when given an antiarrhythmic drug. So the question must be asked - in a young patient with syncope, with a normal EKG, how do you know you are not sending home a patient with a Brugada syndrome which has a high incidence of sudden death? So I posed this question to Tel Hashomer electrophysiologist Dr. Osnat Gurevich. He said that, in addition to an echo and a Holter that are recommended upon discharge, one should recommend a flecanide injection test. This will reveal the syndrome. However, Dr. Hillel Steiner, of the Shaare Zedek Cardiology unit, asked the following question: the incidence rate of Brugada is rare, is it rarer than the incidence of a flecanide induced torsade (a form of ventricular tachycardia)? I say that if the test is being done by an electrophysiologist - and while it is unpleasant – the torsade can be dealt with. As Dr Jerry Hoffman of UCLA says - "do the right thing"
10. Nitroglycerin relief in chest pain is not a good test. In this study (Ann Int Med 16 Dec 03) more people without heart disease on catheterization had relief than those who did. The reason seems to be that nitro works best in chronic stable angina and not as well in acute exacerbations. (ibid, editorial)
11. Recurrent candidal vaginitis is not usually due to treatment failure. Rather is it due to recurrence (Clin Inf Dis 15 Jan 04)

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EMU Looks at: The Summer

The summer is a time when many people travel and go swimming. I want to dedicate this monthly essay to new information on economy class syndrome and near drowning. The sources for the essay on near drowning are the BMJ 6 Dec 03 and Lancet Dec suppl 03. For economy class syndrome see Arch Int Med 8/22 Dec 03. My purpose is not to review each subject - we have discussed them in the past - but rather to provide an update.

1. An interesting thought: when a person is upright in the water the body must also overcome the resistance of the surrounding water. So cardiac output must rise. This is why swimming is such good exercise. However, if a person is lifted out of the water in the upright position the resistance is less in air and this could lead to cardiac collapse. The BMJ recommends taking people out in the prone position.
2. Interestingly enough, most drownings do not have much water in the lungs. In the past we thought that this was due to laryngospasm or hypothermia but less than 30 minutes of immersion will not cause this. It is felt to be due to an arrhythmia.
3. Hypothermia in water will lead to improved survival. The diving reflex in humans is weak, but hypothermia protects from the effects of hypoxia. Children with greater surface areas cool faster and survive better, the cooling of the thorax by ice water aspiration also seems to help.
4. Fresh vs salt water drowning. The ion composition is immaterial. This rarely affects electrolytes. However, fresh water is much more likely to lead to pulmonary edema. Do not forget an early chest x ray - shadows of aspirated water mean a greater danger to ARDS.
5. Also do not forget the need for blood culture. Septicemia is common and brain abscesses may develop later. Leptospirosis is a common bacterium in river water.
6. Economy class syndrome is a cause of pulmonary embolism that we at Tel Hashomer have seen often. The newest data are as follows: risk starts at travel higher than 4960 kilometers and almost triples in flights of 9920 kilometers. PE during the flight or immediately after is very rare - this is a disease of after the flight. For how long the traveler is at risk is unknown. There was a study in the same issue of the Archives of Int Med that none the less pointed out that the incidence of DVT is significant even though most of these cases were asymptomatic and confined to the calf veins. Who is at risk? Those who do not leave their seats during the flight and those whose flight is over six hours. Obesity and age > sixty are at risk. Tall men - over 180 cm - are also at higher risk presumably because they are compressed like a pretzel in their seats! Prevention is through elastic stockings, single dose of LMWH and walking during the flight. It is felt that drinking is also important. El AL is always packed and have added seats by narrowing each row. One therefore should avoid the popular flights of EL AL by either traveling to the USA in stages with a break in Europe (usually these planes are not packed) or by avoiding the overnight flight to NY which is often full.

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