

Sri Lanka Heart News

The official news letter of the

Sri Lanka Heart Association

www.slheart.org

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Annual Academic Sessions

Annual Academic Sessions for 2004 will be at Taj Samudra Hotel on 11th and 12th September. Following on from last years successful sessions this year too the sessions will be over two days with a parallel nurses ICU workshop.

The guest faculty of speakers include both local and foreign cardiologists and specialists from related disciplines. Eight plenary lectures and four symposia are scheduled covering a wide range of topical cardiology subjects. An ECG workshop is also planned.

Dr S Narenthiran Consultant Cardiologist at LRH will deliver the inaugural lecture on 'Paediatric Cardiac Care- Past, Present and the Future'. This is in keeping with this years World Heart Association theme 'Heart disease of Children and Adolescence'.

Dr Reddy's research award for the best research paper will be a highlight of this year's session too.

The Workshop on Intensive Cardiac care for Nurses is very popular now among ICU and cardiology nurses from both the private and government sector. Registration for the workshop is now closed.

The pharmaceutical trade exhibition will run parallel with the sessions.

A detailed program is sent to all members with this newsletter and will also be posted at our website.

Useful web links:

- www.nejm.com
- www.heartjnl.com
- www.bmj.com
- www.thelancet.com

Most journal offer free full text access from Sri Lanka

Annual Academic Sessions
11th- 12th September 2004

Sri Lanka Heart on the Web-
www.slheart.org

Editorial: Statins- bigger doses
Better outcome?

World Heart Day- 26th September
'Children and Heart Disease'

Sri Lanka Heart on the Web

Sri Lanka Heart Association is now on the World Wide Web! The web site was launched at a simple ceremony during last year's annual academic sessions and was well appreciated by the delegates.

The web pages were designed and the site sponsored by Emarchemie Pvt Ltd and will be updated regularly. The site contains several web pages that describe the SLHA and its activities. The World Heart Day activities in Sri Lanka are also highlighted.

Useful health information to the public is also available as downloadable 'pdf' files, which can be printed as health information leaflets. Topics covered include Cholesterol and heart disease, High blood pressure and Heart Attacks. These are available in Sinhalese and some also in English and will be available in all three languages soon.

A web page is dedicated to children's heart projects in Sri Lanka, which sponsor children's heart surgeries. The good work done for the Sri Lankan children by these organizations is highlighted and appreciated

Please visit our website and email your comments to the webmasters. Address is-

www.slheart.org

Editorial:

Statins: Bigger doses- better outcome?

The importance of cholesterol as a coronary artery disease [CAD] risk factor in the multifactorial aetiology of acute coronary syndromes [ACS] became evident when population based observational studies showed higher cholesterol levels associated with a higher incidence of ACS. It is also an established fact now following many randomized controlled trials that cholesterol reduction gives a survival benefit in primary and secondary prevention of CAD.

The formation and rupture of an atherosclerotic plaque is a complex process culminating in a clinical spectrum of ACS ranging from unstable angina to a full thickness myocardial infarction due to 'atherothrombosis'. Traditionally treatment of ACS consisted of preventing the formation and propagation of thrombus over the plaque that ruptured and antiplatelet agents and antithrombins therefore played the key role.

Preventing the initial rupture of a plaque is a more perplexing and challenging issue. Most plaques that rupture causing an infarction are only modestly obstructive before rupture. These may not even cause anginal symptoms beforehand and may not even be detectable angiographically being largely 'extraluminal'. Such lipid rich and thinly capped 'vulnerable plaques' predisposed to rupture show microscopic features of inflammation or plaque 'activation'. Therefore now as part of the therapeutic approach to ACS, plaque 'passivation' is adopted. [1]

Statins are one such group of drugs believed to play a key role in plaque passivation and stabilizing the lipid rich core in ACS in addition to their favourable effects on the lipid profile. Statins have been shown in trials to reduce C-reactive protein [CRP] level a marker of inflammation which is elevated in ACS. High dose atorvastatin causes plaque regression. The pertinent question then is whether the LDL reduction potency, HDL elevating potency, CRP lowering potency, plaque regressing potency or all of the above or some other unknown mechanism beyond cholesterol reduction determines efficacy of statins in ACS.

Many guidelines recommend lowering LDL cholesterol as the marker of cholesterol intervention in ACS and from this stems the tendency to judge the efficacy of a statin in ACS primarily by its potency to reduce LDL cholesterol to target levels. In a large systematic review and meta-analysis, a 40% LDL cholesterol reduction was achieved with atorvastatin 10 mg/ day, lovastatin 40 mg/ day, simvastatin 40 mg/ day, or rosuvastatin 5 mg/ day [2]. The older statins such as lovastatin, simvastatin and pravastatin are thus less potent at LDL cholesterol reduction but

showed remarkable clinical benefit in terms of morbidity and mortality reduction in several primary and secondary prevention trials [simvastatin- 4S trial and HPS trial, pravastatin- WOSCOPS trial]. The newer synthetic statins such as atorvastatin and rosuvastatin are the champions at marked LDL cholesterol reduction but lack such hard clinical evidence at present.

Despite this dilemma in choosing the 'best statin', the worldwide market leader in the enormous statin market presently is atorvastatin [Lipitor] with an 80% share worth 1000 million dollars annually to Pfizer. This success of atorvastatin in the absence of hard clinical evidence, [such as the 4S or HPS trial evidence backing simvastatin despite which it has fallen to a second slot], has arguably much to do with the propaganda and marketing strategy of Pfizer for atorvastatin highlighting its highest LDL reduction potency. Rosuvastatin [Crestor] by Astra Zenica which is even more potent at LDL reduction is therefore a new likely contender for the top slot and is well poised awaiting results from a clinical trial base of 20 Astra Zenica sponsored studies called the 'Galaxy program'.

Two new statin trial results to emerge this year REVERSAL [3] and PROVE-IT [4] tell us that high dose atorvastatin 80 mg daily for 18 months reduces plaque volume compared to a standard dose of statin [pravastatin 40 mg daily which may even increase the plaque volume], and improves clinical outcomes. The message is clear- increase the atorvastatin dose 8 fold, and needless to say the cost of therapy too by nearly the same amount. If high dose intensive statin therapy becomes the order of the day then this master move will increase the Pfizer profits while threatening the survival of its rival Rosuvastatin at the same time, since the latter has many adverse effects when given at higher doses. The 'statin wars' for the top slot is truly on and the peer reviewed journals will now have to do their impartial best to help us decide on the 'best statin' and the 'best dose'.

Also it is worth remembering that statin use is currently suboptimal worldwide mainly due to the prohibitive costs. In such a setting how will health service providers and patients respond to an eight fold increase in cost for statins? Will intensive statin therapy pay for itself reducing recurrent ACS events and prove to be cost beneficial in the long run? Long term cost benefit studies are urgently needed before such policy is widely recommended or accepted.

References:

1. Monroe VS et al. Pharmacologic plaque passivation for the reduction of recurrent cardiac events in Acute Coronary Syndromes Journal of the American College of Cardiology 200; 41; 4[suppl S] 23S-30
2. Cannon CP, Braunwald E, McCabe CH, et al. Comparison of intensive and moderate lipid lowering with statins following acute coronary syndrome. N Engl J Med

2004;350M R Law, N J Wald, A R Rudnicka

3. Quantifying effect of statins on low density lipoprotein cholesterol, ischaemic heart disease, and stroke: systematic review and meta-analysis. BMJ 2003;326:1423-30
4. Nissen SE, Tuzcu EM, Schoenhagen P, et al. Effect of intensive compared with moderate lipid-lowering therapy on progression of coronary atherosclerosis: a randomized controlled trial. JAMA 2004;291:1071-80

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World Heart Day 26th Sept. and Heart Walk 2004!

The theme this year is 'Heart Disease in Children and Adolescence'. SLHA affiliated to World Heart Federation has organized many activities this year too as part of the world wide program.

A grand Heart Walk 2004 will start at 7. 00 AM from LRH to Nawaloka Hospital. Keep this date free to join in this enjoyable event with your family.

'Heart Surf' -Useful cardiology web links

- World Heart Association: www.worldheart.org
- British Medical journal: www.bmj.com
- British Heart Journal [Heart]: www.heartjnl.com
- The lancet: www.thelancet.com
- New England Journal of Medicine: www.nejm.com
- Medscape- For late breaking trials, conference coverage, ECG, Echo, CME: www.medscape.com
- An ECG website: www.ekgreading.com

NB: Most medical journals offer free full text access from Sri Lanka. You may need to go through a simple free registration process at some sites.