



THE KOROTKOFF SOUND

Newsletter of the **Australian Nurses Cardiovascular and Hypertension Association**
Volume 16, Issue 2, July 2011



A NOTE FROM THE

EDITOR

Hello and welcome to the second Korotkoff Sound for 2011. This edition has a little change from the previous format prompted by 2 recent inpatients with exercise-induced hypertension. I hope you enjoy the discussion.

Please feel free to forward any case studies or informative articles for future publications.

Cheers,
Cynthia.

COMMITTEE MEMBERS

(voted at December AGM)

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PRESIDENT'S

NOTE

We have started the countdown for the December conference. Our speakers were all keen to present at the Perth meeting and we look forward to a distinctly Western Australian perspective.

The hypertension unit at Greenslopes has been very busy with several patients with interesting pathology.

It has been very chilly here recently but we have our winning QLD sporting teams to keep our morale high!

Kind regards,
Di.

MEMBERSHIP

ANCHA membership is January to December and fees are payable to the Treasurer (Margaret Ross-Styles). Margaret can be contacted via email at

mstyles@nsccahs.health.nsw.com.

[au](#) or by phone during business hours on (02) 9926 7210.

One year membership - \$45.00

Two year membership - \$80.00

Payment is by cheque or money order and made payable to 'ANCHA'.

CONFERENCE NEWS

This year's ANCHA conference is scheduled for **Friday 9th**

December at the **Perth Convention and Exhibition Centre**. "**Hypertension – West Side Story**" is our theme and all presenters are from the Perth medical community. All speakers are confirmed however, we are awaiting topics and speaker biographies for the final program.

HBPRCA has once again offered to sponsor the venue and facilities for ANCHA's seminar for which we are very appreciative.

Please see HBPRCA website for details of registration and program www.hbprca.com.au. Online registration for the conference can be conducted through Meetings First as per 2010 www.meetingsfirst.com.au. Early bird registration closes on 31st October.

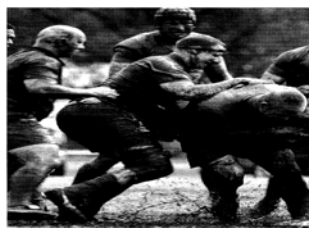
INTERESTING CASES & DISCUSSION

We recently had two referrals within a month to our unit - young fit males with Hypertension. ?exacerbated /caused by strenuous exercise.

Male 1 –

Age 16, year 12 at private school, plays elite-level school rugby union. Non-identical twin, other twin healthy. Past Hx febrile convulsions from age 2 treated with

Tegretol & then Dilantin discontinued at age 9. (L) knee reconstruction in 7/2009 – HT during OT given IV clonidine. Well until 12/2010 noted BP elevated on home BP machine after short run. Symptoms SOB++ & malaise occurred during flood clean up 2011. Referred on no treatment (previously 1 agent briefly) for significantly elevated SBP during exercise & reduced stamina level.



Male 2 –

Age 22, fit athlete in martial arts – trains 2 ½ - 3hrs/day with the intention to increase up to 6hrs/day to gain black belt status. Referred for assessment & management of predominantly systolic HT. BP on admission was controlled on 2 agents, but marked BP elevation with exercise.



Discussion

"**Exercise is Medicine**" campaign was launched 20th May this year with the aim of improving public health through counselling and, where appropriate, exercise "prescription" or referral to an accredited exercise physiologist or fitness professional.

A website has been created www.exerciseismedicine.org.au which contains educational material

for health care providers and the public. Assessment of physical activity should be a component of every patient's visit to the GP, with support, education and treatment also provided by Practice Nurses and Allied Health professionals.

The recommendations to maintain health and reduce the risk of chronic disease is 30mins of moderate intensity physical activity 5 days per week or vigorous intensity activity for 20mins 3 days per week, plus 2 days of resistance exercise. If the goal is to lose weight or maintain weight loss then 60-90mins may be necessary.

It is estimated that the cost of physical inactivity to the Australian economy is \$13.8 billion (2008), with estimated 16178 Australians dying prematurely (Source Medibank 2008).

As nurses, regular physical activity is a lifestyle modification we routinely recommend to our patients with hypertension. However, special consideration is needed as to the intensity and frequency of the physical activity.

The Australian Association for Exercise and Sports Science (ESSA) position statement on Exercise and Hypertension can be accessed via the "resources" tab of Exercise is Medicine website (see above). "The Heart Foundation Guide to management of hypertension" (updated 2010) also discusses regular physical activity (see page 13) as part of lifestyle modification for all patients with hypertension, with notes to advise against isometric exercise routines unless they are professionally supervised programs.

An exercise physiologist is an important resource when designing

and implementing an exercise and education program. This was certainly the case with both young patients discussed above. Referral to the exercise physiologist included relevant medical history, BP response to exercise and recommended type of activity and acceptable maximum BP.



SMART READ

Heart foundation Guide to management of Hypertension 2008 (updated Dec 2010) – page 13 "Lifestyle Modification" recommendations include healthy targets of activity.

Sharman JE & Stowasser M Australian Association for Exercise and Sports Science Position Statement on Exercise and Hypertension. *Journal of Science and Medicine in Sport* 2009; **12**:252-257.

Turmel J, Bougault V, Boulet LP, Poirier P. Hypertensive response to exercise: a marker of altered metabolism in endurance athletes? *British Journal of Sports Medicine* 2011, **45**; 378.

Hare JL, Marwick TH, Schultz MG, Sharman JE, Stowasser M. Measurement of blood pressure during a single bout of low intensity exercise identifies patients with masked hypertension. *HBPRCA Dec 2009 ASM: 31st ASM of HBPRCA*, 1509 (abstracts).

Hare J, Sharman J, Thomas S, Leano RL, Marwick TH. Masked hypertension is common in patients with a hypertensive response to exercise and may help to explain increased cardiovascular risk in this population. *ASM of the Cardiac*

Society of Australia and New Zealand 2008. S47 (abstracts).

Aaron L, Baggish MD, Malissa J, Wood MD. Athlete's Heart and Cardiovascular Care of the Athlete. *Circulation* 2011, **123**; 2723-2735.

Wallace JP. Exercise in Hypertension: A Clinical Review. *Sports Medicine* 2003, **33 (8)**; 585-598.

Abhimanyu U et al. Interpretation of the Electrocardiogram of Young Athletes. *Circulation* 2011, **124**; 669-671.

EXCITING NEWS / UNIT UPDATES

Your editor is counting the shifts until her sister arrives back from the UK with husband, toddler and new baby. Then it is time for some long-service leave in September to spend time with the family.

Di C. has finished her final assignments for her nurse practitioner course. Congratulations on a sterling effort.

Di R. is planning to learn Portuguese so that she can communicate with the in-laws-to-be at the upcoming nuptials in Brazil. She bought a book of 501 Portuguese verbs which is gathering dust on her bedside table! (Hopefully if it gets some use, she won't require nouns and adjectives.)

Welcome to our newest member June from Royal Prince Alfred Hospital. We hope to meet up with you in Perth.

Please email me at hypertension.gph@ramsayhealth.com.au if you have any great news to share.

CONTACT US
www.ancha.org.au