

### CME: Spina bifida

This month's education component continues to advise on the management of children born with spina bifida/myelomeningocele and securing long-term quality of life for these children. This is dependent on the challenges of their disability being recognised, met and overcome, so that handicap is minimised, ensuring social integration, education, employment and independence.

### ACEIs v. ARBs: A cost-benefit analysis

Hypertension poses a financial risk to any funder/medical aid scheme, not least because, according to the annual report of the South African Council for Medical Schemes for 2010 - 2011, hypertension is the most prevalent chronic disease among medical aid members, affecting 11.7%. The medical aid industry has >8 million beneficiaries, of whom ~1 million members will require treatment for hypertension. The most up-to-date South African Hypertension Guideline states that the choice of therapy for either an angiotensin converting enzyme inhibitor (ACEI) or an angiotensin receptor blocker (ARB) should be based on cost and tolerability. A health economic analysis<sup>[1]</sup> reveals that it is more cost beneficial to treat chronic hypertensive patients with an ACEI than with ARBs to prevent cardiovascular-related complications. Managed-care companies should continue to recommend ACEIs rather than ARBs in the treatment of their hypertensive patients.

### Cisplatin-induced ototoxicity

Cisplatin is administered as the first-line treatment of soft-tissue cancers and has a reported cure rate of up to 85%. However, ototoxicity, characterised by irreversible bilateral hearing loss, affects 23 - 50% of adults and up to 60% of children. Such ototoxicity has been shown to be dependent on age at initiation of treatment, with those under 5 years and those over 40 years of age being most susceptible. An incidence of cisplatin-induced ototoxicity (55.1%) was observed in an adult population in South Africa (SA) studied by Whitehorn *et al.*,<sup>[2]</sup> of whom 62.7% experienced bilateral hearing loss. This study highlights the importance of regular audiological monitoring of patients receiving high-dose cisplatin. Adequate knowledge of the complication of ototoxicity on the part of clinicians may facilitate the prevention or amelioration of further ototoxic damage through administration of otoprotective agents, or a change of chemotherapeutic drugs. The authors call for further research aimed at understanding other risk factors, particularly genetic predictors of cisplatin-induced ototoxicity in the uniquely diverse SA population.

### Acute porphyria: Unusual presentation

Acute intermittent porphyria (AIP) is the most common porphyria affecting the nervous system. Albertyn *et al.*<sup>[3]</sup> describe an unusual presentation in a young man with AIP, a reminder that acute forms of porphyria should never be forgotten when confronted with a patient with unexplained motor neuropathy, whether or not the characteristic features of the acute attack are present. This patient was fortunate in being referred to a neurology unit where exclusion of porphyria is a standard practice for patients with unexplained neuropathy, given the very high prevalence of porphyria in the SA population. He, unusually, improved rapidly in response to definitive therapy for porphyria with haem arginate, even though neurophysiological studies confirmed the presence of axonal necrosis. For those with a research interest in neuropathophysiology, this example is an invitation<sup>[4]</sup> to explore the interplay of disordered haem synthesis and neuronal function.

### Breast cancer screening in SA

Breast cancer is a growing healthcare burden especially in the developing world and is the most common female cancer, accounting for 20% of all cancers in women in SA. The experience of breast cancer screening at the Tygerberg Academic Hospital, a tertiary referral hospital in Western Cape Province, SA,<sup>[5]</sup> indicates a high breast-cancer load in this urbanised population. The authors point out that the well documented shortage of radiologists, specifically breast radiologists, must not prevent the urgent establishment of breast centres to cater for the rapidly rising disease burden of breast cancer in our country while there are experienced trained surgeons, with a special interest in breast health, available to interpret breast imaging.

### Risks associated with magnetic bead ingestion

Paediatric surgeons, Cox *et al.*,<sup>[6]</sup> draw attention to the risks of gastrointestinal (GI) injury due to ingested magnetic beads. They are freely available at many large retail stores and sold as an executive stress toy. If several are ingested, the magnets conglomerate in different segments of bowel, causing pressure necrosis, perforation and/or fistula formation anywhere along the GI tract. Symptoms do not occur until complications have developed, and even then, unless magnetic ingestion is suspected, treatment may initially be mistakenly expectant, as with any other foreign body. The authors reproducing the likely sequence of events in a laboratory setting using fresh, post-mortem porcine bowel as an animal model. Pressure-induced perforation appeared extremely rapidly, replicating the operative findings in their cases. If magnet ingestion is suspected, early endoscopic or surgical retrieval is mandatory. Appropriate, rapid, surgical intervention is indicated, laparoscopy offering a minimally invasive therapeutic option.

### SciELO (SA): Enhancing SA research

I recently joined editors, publishers and researchers in São Paulo, Brazil, to celebrate the 15th anniversary of the Scientific Electronic Library Online (SciELO), which was joined by SciELO SA as its first African extension in 2009. SciELO SA was established by the Academy of Science of South Africa and is funded by the Department of Science and Technology. Two Health and Medical Publishing Group journals, the *SAMJ* and the *South African Journal of Surgery*, have already been accepted onto the platform.<sup>[7]</sup> Thomson Reuters: Intellectual Property and Science announced recently that it is now collaborating with the SciELO Network Portal to integrate the SciELO Citation Index into the Web of Knowledge. This initiative will bring even greater visibility and improved access to research from emerging countries like SA.

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1. Makkink JL, Greeff OBW. Angiotensin converting enzyme inhibitors v. angiotensin receptor blockers in the management of hypertension: A funder's perspective. *S Afr Med J* 2014;104(4):292-293. [http://dx.doi.org/10.7196/SAM.7593]
2. Whitehorn H, Sibanda M, Lacerda M, et al. High prevalence of cisplatin-induced ototoxicity in Cape Town, South Africa. *S Afr Med J* 2014;104(4):288-291. [http://dx.doi.org/10.7196/SAMJ.7389]
3. Albertyn CH, Sonderup M, Bryer A, Corrigan A, Meissner P, Heckmann JM. Acute intermittent porphyria presenting as progressive muscular atrophy in a young African man. *S Afr Med J* 2014;104(4):283-285. [http://dx.doi.org/10.7196/SAMJ.7785]
4. Sonderup MW, Hift RJ. The neurological manifestations of the acute porphyrias. *S Afr Med J* 2014;104(4):285-286. [http://dx.doi.org/10.7196/SAMJ.7782]
5. Apffelstaedt JP, Dalmayer L, Baatjes K. Mammographic screening for breast cancer in a resource-restricted environment. *S Afr Med J* 2014;104(4):294-296. [http://dx.doi.org/10.7196/SAMJ.7246]
6. Cox S, Brown R, Millar A, Numanoglu A, Alexander A, Theron A. The risks of gastrointestinal injury due to ingested magnetic beads. *S Afr Med J* 2014;104(4):277-278. [http://dx.doi.org/10.7196/SAMJ.7500]
7. Veldsman S, Gevers W. Increased visibility and discoverability of South African health-related research. *S Afr Med J* 2014;104(4):287. [http://dx.doi.org/10.7196/SAMJ.7934]