EDITORIAL

Promoting Knowledge Exchange in Radiology

WCW Chu
Editor-in-Chief, *Hong Kong Journal of Radiology*

Three years ago, the HKJR Editorial Board decided to introduce a new feature to the Journal—namely, that dedicated individual issues would focus on a specific disorder or body system. Last year, three of the four Journal issues had specific themes: Musculoskeletal Imaging and Oncology (Volume 20, Issue 1), Imaging and Treatment of Hepatocellular Carcinoma (Volume 20, Issue 3), and Gastrointestinal Imaging and Oncology (Volume 20, Issue 4). These issues included Review Articles, Original Articles, Pictorial Essays, and Case Reports relating to those particular themes. This year, we will publish issues on themes relating to head and neck imaging and oncology, as well as cardiac and thoracic imaging and oncology. A specific focus on nasopharyngeal carcinoma will be the theme of a future issue in 2019, and submissions of relevant Original Articles are welcome.

The introduction of theme-based issues marks our determination to strive for the betterment of Journal publication and knowledge exchange by merging the expertise of both radiologists and oncologists in the management of clinical problems. Specific themes are decided on the basis of both regional interest (reader suggestions are welcome) and hot topics of accepted papers. We are also gratified to have received Letters to the Editor that have commented on articles published in earlier issues, and we encourage both local and international readers to submit correspondence, which undergoes fast-tracked peer review. We believe that our Journal does and will continue to serve as a platform for academic exchange and the sharing of practical advice among professionals in radiology. It is always the privilege of the HKJR Editorial Board to receive feedback, suggestions, and opinions from our readers.

There will also be occasional HKJR issues that are without a specific theme, such as the current issue. This arrangement will allow for the inclusion of accepted articles from different subspecialties, while ensuring that there will not be too much delay in publishing valuable reviews or research articles that fall outside the scope of the set themes. When possible, articles on similar topics will still be grouped together to make for interesting reading. In this issue, there are various articles covering overlapping topics in paediatric imaging, brain and breast imaging, and interventional radiology, all of which contain valuable information useful for daily radiology practice.

In a recent update of consumer health information by the United States Food and Drug Administration, careful use of medical imaging that involves ionising radiation is again emphasised for the paediatric population, defined as birth to 21 years of age.\(^1\) According to the new guidelines, medical X-ray imaging should be optimised to use the lowest radiation dose needed. These examinations, which include computed tomography (CT), fluoroscopy, and dental and conventional X-rays, should be performed on children and younger patients only when the health care provider believes they are necessary to answer a clinical question or to guide treatment.\(^1\) These guidelines are not new to the radiology community but do raise public awareness about potential radiation hazards in medical imaging, especially CT. Thanks to advances in technology, the scanning parameters in most of the modern CT scanners are already optimised by using dose-reduction techniques, such as automatic tube modulation and automated tube voltage. A drawback of dose reduction in CT is increased noise of the images, which may lower diagnostic confidence. The noise problem, however, can be overcome by new post-processing techniques. In this issue, Lee et al\(^2\) investigate the effect of the combination of high-pitch dual-source imaging and iterative reconstruction algorithm on both objective and subjective image quality. They conclude that this manoeuvre allows radiation dose to be lowered, while diagnostic imaging quality can be preserved or even improved.
Interventional radiology plays a pivotal role in minimally invasive therapy nowadays and has an increasing role in the management of various disorders. There is increasing demand for interventional radiological services in most tertiary referral hospitals. Two articles in this issue review the outcome of interventional radiology procedures. Lee et al. share their institutional experience of multidisciplinary, one-stop integrated care for paediatric patients with low-flow vascular malformations. The roles of diagnostic imaging before and after interventional procedures, as well as the technique of percutaneous sclerotherapy, are briefly discussed with illustrative examples. Different types of sclerosants are used in patients with either venous or lymphatic malformation. The pros and cons of different sclerosants and the factors affecting the choice of sclerosants in different body regions are discussed. The technical efficacy, safety, and outcome for all patients recruited during a period of 6 years in the authors’ tertiary referral centre are systemically reviewed. Their Joint Vascular Anomalies Clinic is shown to be a successful model that offers patients optimal and individualised treatment plans, with safe and effective outcomes.

Tang et al. evaluate the angiographic results (in terms of Thrombolysis in Cerebral Infarction Scale score) and clinical outcome (as assessed by the National Institutes of Health Stroke Scale and modified Rankin scale scores) of patients who underwent endovascular treatment in a tertiary referral centre for acute ischaemic stroke. The technique of aspiration thrombectomy and stent-retriever thrombectomy is described. The authors note that the revascularisation rate after endovascular treatment is relatively high, at >70%, and that there is a significantly improved clinical outcome for patients with successful reperfusion of the brain. Although the technique is not completely free of complications, which include carotid artery dissection and intraprocedural cerebral haemorrhage, the reported incidence is relatively low (<8%) in experienced hands and not associated with mortality. There are still unresolved questions regarding the optimal treatment device and management strategy for certain subgroups of patients, such as those with posterior circulation stroke. The authors rightly conclude that future larger scale studies are required to provide the answers.

Two articles in this issue are related to magnetic resonance (MR) imaging of encephalopathy. Chan et al. evaluate MR image variables that are predictive of neurological outcome in children with acute encephalitis. The majority of children in the cohort studied had an infectious viral agent identified. Although this is a retrospective study, the information provided by this article is valuable and timely, given recent seasonal influenza epidemics. In Hong Kong, there were more than 400 paediatric influenza cases registered at kindergartens and primary schools in the first 2 months of 2018, and a few deaths were reported. Chan et al. found that the presence of restricted diffusion on MR imaging and involvement of deep grey nuclei and brainstem were predictive of adverse neurological outcome (as assessed by the Pediatric Cerebral Performance Category Scale score) in children presenting with encephalopathy.

Baek et al. illustrate a spectrum of different neuroimaging findings in adults with alcohol-induced encephalopathy. Representative images are included for alcohol-induced brain atrophy, osmotic demyelination syndrome, Marchiafava-Bignami disease, Wernicke’s encephalopathy, hepatic encephalopathy, and alcohol withdrawal syndrome.

Last but not least, two articles describe the imaging features of specific subtypes of carcinoma of the breast. Lee et al. analyse mammographic, ultrasonographic, and MR features of mucinous carcinoma, whereas Matsumoto et al. describe the imaging and histological features of encapsulated papillary carcinoma.

We hope our readers enjoy this issue as much as the theme-specific issues and also find the information useful in their own practice. As always, the HKJR Editorial Board appreciates the contributions of authors and reviewers, and welcomes feedback and comments from our readers.

REFERENCES

4. Tang DC, Chu CY, Li R, Cheng SW, Ng RY, Tse JC, et al. Endovascular treatment for acute ischaemic stroke due to large-

HKJR Call for Papers – Theme Issues

The following themes have been set for future issues of HKJR. The Editorial Board would like to invite authors to submit papers (reviews, research articles, pictorial essays, or brief communications) on these topics:

**Theme** (deadline for initial submission of manuscripts)
- Head & Neck Imaging and Oncology (16 April 2018)
- Cardiac & Thoracic Imaging and Oncology (29 June 2018)
- Nasopharyngeal Carcinoma (31 October 2018)

Criteria for selection of manuscripts include: (1) quality, rigor and originality; (2) significance and usefulness for enhancing our understanding of the topics; and (3) clarity of writing and presentation. All manuscripts must follow the “Information for Authors” listed at: [http://www.hkjr.org/page/information-author>.

Manuscripts submitted for the Theme Issues will first undergo the same peer review process as all regular manuscripts. Owing to the timeline for publishing each Theme Issue, however, HKJR will monitor the progress of manuscripts through the review process and try to shorten the overall process; likewise, authors should expect to be especially timely in returning revisions.

Authors should submit the papers via our online submission system: [http://www.hkamedtrack.org/hkjr>.