

JULY 2018 | ISSUE 1

Radiology Now

OFFICIAL NEWSLETTER
OF THE BSR



Dear Colleagues,

We are pleased to send you the first BSR Newsletter.

One of our missions is to keep our members informed of topics that may have a significant influence on our practice.

Our attention is and will be mainly focused on important government decisions, the implementation process and BSR's input into the negotiations.

We will also show interest in disruptive scientific developments in our field of competence and deliver news from the scientific council.

Last but not least, you will receive regular updates from the Young Radiologists Section (YRS), including a quiz case.

Please feel free to send your comments and questions to info@bsr-web.be.

We hope you will enjoy this newsletter.

Sincerely,

Geert Villeirs
President BSR

Piet Vanhoenacker
Managing Director BSR

WHAT'S NEW FROM THE SCIENTIFIC COUNCIL



Annual meeting

- The final programme of the Annual Meeting of the BSR 2018 is now available online. This year's edition will feature lectures on Head & Neck radiology and Interventional radiology. <https://bsrmeeting18.org/>
- Even though this year's meeting has yet to take place, preparations for the Annual Meeting of 2019 have already begun. The proposed topics for next year's session are female (pelvic) imaging and a "transverse subject". These topics are still subject to change. The respective section responsible will be approached shortly.

Approvals

- The principle of reimbursement of costs related to PhD-theses has been reapproved. The conditions are the same as they were before, with just some minor changes in particular to the request to improve the visibility of the PhD. PhD students will have to present their findings at a section meeting or at the annual symposium and will have to provide a summary or an article in the JBSR. For more information, check out the guidelines which are available online.



JBSR

- JBSR, which currently has an impact factor of 0.027, is expected to be available in PubMed soon. The administration may still take some time. An upgraded set-up for reviewers is under construction (new reviewer template - CME-credits for reviewers...). The lack of availability of issues of the JBR/BTR before 2010 is also under investigation.



Politics

- An effort is taken to increase the responsibilities of the sections and the scientific council in general. At present the BSR is relatively well known to the authorities as the single interlocutor for both scientific and organisational matters raised from the government: open mindedness and discussion creates more final impact and better communication than shortcuts to the government initiated by partly endorsed organs or individuals. However, the scientific endorsement of policies and points of view of our society remains often insufficient; Therefore the sections will be actively involved in specific matters (i.e. questions by the president, KCE/, RIZIV/INAMI, media, ...). The president of the BSR will inform the section chairs of specific problems or requests and invite them to discuss these within their appropriate section. The question will be announced on the website of the BSR and will be open for members' input within a strict time frame. The name of the contributor (-s) will be announced in the official answer, and this final answer or point of view will be available on the website. The expected benefit for the BSR is to strengthen its credibility and reliability towards the government and to create a broader acceptance and support among its members.
- The BSR has been asked to present its point of view on ultrasonography by non-radiologists at the meeting of the TGR (Technische Geneeskundige Raad, RIZIV/INAMI organ) on September 4th, 2018. This important subject has already been discussed extensively during the meeting of the scientific council in May 2018. A document will be prepared by the BSR before the TGR meeting and will be presented by Olivier Ghekiere. Please feel free to provide your valuable input on this delicate topic.



MR Programming

In 2014, the so-called Protocol Agreement 1 was concluded, which provided for the installation of 12 new MR devices (7 in Flanders and 5 in Wallonia). These units were installed in the course of 2015-2016, bringing the total number of approved units in Belgium to 121. Alongside the extension of the MR programming a register of heavy medical equipment was set up. However, this revealed that there were 17 MR units operating in Belgium without authorization. These units were taken out of service by operation of law on 1 June 2016, as a result of which the active fleet ultimately decreased by 5 units. This caused great commotion because there were fears that this decrease would lead to an overall reduction in MR capacity, resulting in an acute increase in waiting lists.

In practice, however, there was no such reduction in MR capacity. Whereas 920,000 MR studies had been carried out in 2014, this number had risen to 980,000 in 2015. In 2016 the mark of 1 million MR studies was passed (1,010,000). The provisional figures for 2017 show a further increase in this number. This can only mean that the increasing demand for MR examinations has been offset by an intensified use of the existing MR devices (earlier opening, later closing, night and weekend activity).

At the same time, there was an increase in the annual number of CT examinations (2,180,000 in 2014, 2,290,000 in 2015 and 2,380,000 in 2016), which meant that the desired shift from CT to MR examinations could not be achieved.

Finally, there are major regional differences in the use of CT and MR imaging: in general CT is used primarily in Wallonia and Brussels (more CT devices and a higher number of CT examinations per 1000 inhabitants per year), while Flanders uses relatively more MR (more examinations per device per year and a lower CT/MR ratio). Moreover, significant differences in the use of CT and MR can be observed between arrondissements.

All these factors combined have not made it any easier for the BSR to take an unequivocal position on the further extension of the MR programming. On the one hand, the BSR subscribes to the principle that all hospitals should have at least one MR device available, but on the other hand, the installation of new devices should not lead to an uncompensated budget increase. This could happen, for instance, if each of the new devices would reach the national average of 8 300 examinations per device per year, while all the other devices maintain their (currently increased) capacity. If the budget is exceeded, this will inevitably lead to a linear fee reduction, a measure which the BSR will try to avoid by every possible means.



HOT TOPIC

The BSR therefore suggests the introduction of active decision support. This solution involves that every request for medical imaging is immediately assessed by the prescriber against the applicable European Guidelines for the Proper Use of Medical Imaging. As a result, non-justified examinations can be prevented at the time of the application itself and no longer end up in the appointment book of the medical imaging service. In this way, the number of medical imaging examinations can be controlled on the basis of an objective parameter. This volume control frees up budget for useful reinvestment (additional MR devices, better nomenclature for interventional radiology, etc.) while at the same time remedying the current regional and even arrondissement differences. The implementation of active decision support is currently in a proof-of-concept phase, which means that a national roll-out should be expected in the medium term, rather than in the short term. Of course, this is a (too) long time horizon for hospitals that are currently still waiting for their first MR device.

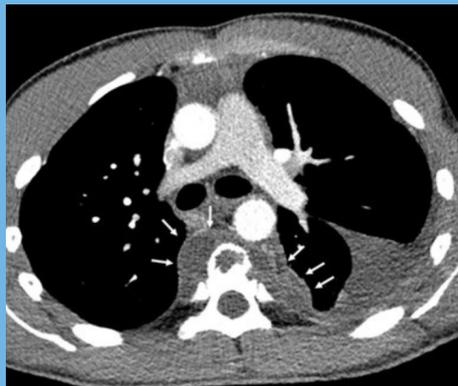
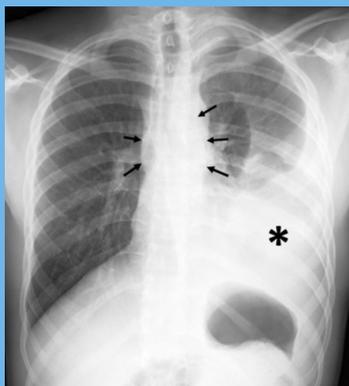
For this reason, the BSR, together with the government, is now exploring the possibilities of an interim solution, in which the CT and MR activity of hospitals or networks is compared with a standardized national benchmark. By doing so, abnormally high volumes of CT and/or MR examinations or abnormal CT/MR ratios could be mapped and, if desired, resolved, so that, in anticipation of active decision support, a budget could still be made available for the expansion of the MR park. The negotiations on this matter are ongoing and will hopefully lead to the conclusion of a second Protocol Agreement in the near future.

CASE QUIZ



By Anne-Sophie Vanhoenacker & Nicolas Devos

**What abnormalities do you see on the following images?
Click on the images to test yourself!**





Artificial intelligence: Friend or Foe?

By Cedric Bohyn

Over the last few years, interest in Artificial Intelligence (AI) has skyrocketed. All scientific fields, including medical fields such as Radiology, have seen an increase in the use of this trending technology. Whereas some expert radiologists are very enthusiastic about the possibilities, others fear it may well be the downfall of our profession. Should you rejoice in the rise of AI in radiology or rather cringe at the thought of it? Let's take a look at the facts.

What AI is and how it can help interpret images

A deep learning algorithm or artificial neural network, a frequently used technique in AI, works like our own visual cortex. The first layers process simple features such as edges, whereas subsequent layers combine previously detected features in order to recognize more complex characteristics. Neural networks have shown to bring added value in image interpretation. In comparison to humans, they show superior performance in some aspects of audio recognition and visual tasks.

The myth of job loss

Bold predictions have been made concerning the future of diagnostic radiology, such as the one which states that the profession of radiologists will cease to exist within the coming 5 to 10 years. However, the expertise of a well-seasoned radiologist goes far beyond the pure interpretation of images. Although new techniques and algorithms are introduced at a very high pace, it will probably take at least another decade for this technology to be able to detect all kinds of abnormalities in the wide spectrum of existing imaging modalities. That's without taking into account the necessary integration of clinical data in AI. It is a popular opinion among experts that AI will more likely function as a radiologist's daily assistant, rather than supplant the radiologist.

A high potential personal assistant

There are many ways in which AI could be of help to radiologists. AI could for example assist in pre-screening images. This would probably be a most welcome help in working through the daily bulk of chest x-rays. Alternatively, it could for example help to prioritize those examinations which show clinically important findings and even help with their identification.



Contrary to radiologists, AI has the great advantage that it never runs out of energy. It doesn't take a lunch break. Nor does it sleep. As such, the technology is well suited to complete automatic check-ups in the background, assuring no important findings are overlooked before validating a report. Moreover, AI could help us quantify measurements automatically and thus allow us to focus our time on more important matters. AI could also provide us and clinicians with accurate prognostic predictions by contributing quantitative radiologic features to a specific genetic subtype of a tumor (a field known as radiogenomics or imaging genomics). It is clear that these are just a few examples from an endless list of possibilities. It's just the tip of the iceberg.

Reclaiming our field

Although the use of AI is still in its infancy, we can already see how AI will positively affect our daily radiology practice in the future. Rather than replacing the profession of radiology, it can optimise our workflow and help decrease the less attractive repetitive tasks for radiologists. However, instead of being marketed to radiologists, AI products are often marketed to clinicians (e.g. longitudinal measurements of disease burden, disease activity in multiple sclerosis, and functional significance of coronary artery stenosis). This is problematic. Radiologists should be the ones at the forefront of AI implementation in radiology practice. To ensure the quality of the technology, it is of utmost importance that radiologists not only use and review the technology, but are actively involved in the development of AI alongside computer scientists.

There's no doubt that AI will dramatically change the future of radiology. But change isn't always a bad thing. Remember the introduction of cross-sectional imaging or the implementation of PACS? These changes provided us with numerous new possibilities. So will AI.

Source: Journal of The American College of Radiology Volume 15, Issue 3, Part A & B



This article was brought to you by the Young Radiologist Section (YRS). <http://youngradiologists.be/>

Interested in the fascinating the future of radiology with AI?

Join us at the BSR-YRS annual meeting!

Visit <https://bsrmeeting18.org/> to learn more.





Board of directors' meeting april 17th

1. Approval of the previous meeting report

The draft report of the meeting of 20.02.2018 is approved.

2. Optimisation of the BSR organisation

In 2017, the BSR had 860 paying members, who are entitled to a number of services from their professional association. The BSR is represented in different prominent instances. However, it seems difficult to find radiologists who are ready to serve in the different commissions. Moreover, the scientific sections should provide more support for the preparation of the Medical Technical Council for example. Currently, our members are not sufficiently informed on the BSR activities. They need to be better informed about the background of the different topics through the reports of the board meetings. They must receive a concise summary in a newsletter. For instance, the meeting agenda could be posted online for their information.

2.1 Webmaster and treasurer

These two functions have always been performed by Dr P. Vanhoenacker. Mr S. Standaert is in charge of the website maintenance. A managing director should be appointed in order to solve all the everyday operational problems in a (more) efficient way. Exceptionally, P. Vanhoenacker accepts to extend his term of office for one more year. However, he makes a special appeal to his colleagues to take over his functions at the 2019 general assembly.

2.2 Public relations

Concise summaries of the board of directors meetings should be posted on the website. The professional union conducts numerous activities but the members are not sufficiently informed in that respect.

A rapid intervention team should be appointed in order to react quickly to occasional 'incidents' such as the mammography issue for example. Within a short time, we must be able to write a press release or give an interview.

2.3. Provincial councils

The Provincial councils work in two directions. The heads of department get information on sensitive issues and, at the same time, these meetings are an opportunity to find out what is going on on the field.

We note that the Provincial councils do not work optimally in all the provinces. Each province is reviewed. Dr P. Aerts makes his PPT presentation available to the members of the board of directors.



2.4. Scientific council

It is essential that the issues which must be advocated are backed up with solid scientific support. A list of the names and details of all the sections' presidents and secretaries must be available.

3. Miscellaneous

3.1. Discussion on the mammography issue (nomenclature 'on hold')

The Royal Decree (RD) of 14.01.2018 modifying articles 17, § 1, and 17ter, A and B, of the annex to the RD of 14.09.1984 establishing the nomenclature with regard to mammography, has been published in the Belgian Official Journal (BOJ) on 26.02.2018. This decree has been published after years of concertation with a wide range of interest groups and instances. It is based on internationally approved guidelines. It is therefore incomprehensible that a small, exclusively French-speaking group has succeeded in suspending the implementation of this decree through their political contacts. On 28.03.2018, the RD of 25.03.2018 was published, postponing the entry into force of the first decree until a date to be determined by the King.

The French-speaking general practitioners and the Flemish gynaecologists already agree with the new nomenclature. The radiology department of the Bordet hospital also supports it.

3.2. Composition of the French-speaking accreditation commission

The GBS/VBS (Federation of Belgian Specialists) has been invited to submit the candidates for the French-speaking recognition commission by 15.05.2018. In view of the collaboration agreement between GBS/VBS and ABSyM/BVAS, the candidates must be members of both organisations.

3.3. Annual Congress – 17.11.2018

The program is nearing completion. A number speakers have yet to confirm their participation. As soon as possible, a save the date will be posted on the website.

The YRS will organise an after party.

In the context of the annual congress, the YSR will conduct a survey among the heads of the radiology services, the recently recognised radiologists and trainee specialists on the job market.

3.4. National Council of Quality Promotion

Candidates O. Ghekiere (ABSyM/BVAS) – J.P. Joris (BSR)



3.5. History Section

Creation of a new History Section, which will be the museum's new face.

3.6. Royal Decree of 31.07.2017

Royal Decree of 31.07.2017 modifying the RD of 12.06.2008 concerning the planning of the medical offer, published in the BOJ of 10.08.2017. It determines the number of candidates who can get the professional title. The Planning Commission recommends the quotas per specific professional title to the competent Communities, which shall determine these sub-quotas by themselves. The training of 25 radiologists has been scheduled (15 in Flanders and 10 in the French Community). On 25.04.2018, the discussions will start at the Agentschap Zorg en Gezondheid of the Flemish community. The GBS/VBS will have a part in these discussions.

3.7. B-Quaadriil

B-Quaadriil has been completed but still needs to be approved. The system must be tested with the connexists (not all the points apply to them) and the nuclearists. The nuclearists must comply with Bquaanum. However, they also have to fulfil B-Quaadriil requirements for the CT part of the PET-CT.

MEMBERSHIP



Enjoy the benefits of BSR and now also ESSR!

The BSR is in constant motion and more than ever, being a member is very attractive. As the most important radiologists' organisation in Belgium, the BSR keeps offering new advantages while actively defending the profession.

We are glad to announce that BSR launches cooperation with the European Society of Skeletal Radiology (ESSR). Thanks to a joint effort of the ESSR and BSR, our members can now join ESSR at an reduced rate.

BSR membership

Benefits

- Registration discount at the 2018 annual symposium of the BSR (Interventional Radiology, Head & Neck and Artificial Intelligence)
- Free publication of articles in the free access Journal of the Belgian Society of Radiology (JBSR), meaning a saving of € 300
- Members-only pages on the website.
- Free European Society of Radiology (ESR) membership
- Reduced membership fee for ESSR (European Society of Skeletal Radiology) and CIRSE (Cardiovascular and Interventional Radiology Society of Europe)
- BSR newsletters
- Free Advice
- Registration discount for IMAIOS e-anatomy and RAD-Primer

Pricing

Subscription fee per member category:

- Certified radiologists practicing in Belgium: € 400
- Retired members or radiologists practicing abroad: € 130
- Trainee radiologists: € 50
- Honorary members: no subscription fees
- Membership ESSR : Add 60 euro and/or contact (info@bsr-web.be), see below for More information.
- Membership CIRSE: please contact info@bsr-web.be

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 - Bank: ING Belgium

We invite you to pay your subscription to benefit from the membership advantages. Please feel free to contact the BSR infodesk (info@bsr-web.be) should you have any question related to the online payment process.

Communication

Fill in the online form or send an e-mail to info@bsr-web.be.

Please include the following information:

- Last name & name
- RIZIV/INAMI number
- Invoice number

ESSR membership

BSR members can become a member for 60 Euro instead of 80 Euro (40 Euro for members in training). Please proceed as mentioned on the request for payment from the BSR, to be a part of the premier MSK imaging Society of Europe! (info@bsr-web.be)

Benefits

- Representation of musculoskeletal radiology on a European level
- Reduced registration fees at the Annual Meetings of the Society
- Free online access to Seminars in Musculoskeletal Radiology (Thieme)
- ESSR Newsletter
- Special online subscription rates for "Skeletal Radiology" (Springer) (PLEASE NOTE: Your online login data will be sent by Springer in a separate email after subscription)
- Special online and print subscription rates for "Skeletal Radiology" (Springer)
- Special print subscription rates for "Seminars in Musculoskeletal Radiology" (Thieme)
- Young investigator research grants
- Database of research interests
- Personal ESSR Account with access to Member's Directory, etc. (MyUserArea)
- ESSR Diploma in musculoskeletal radiology
- Educational material in musculoskeletal radiology
- Membership certificate
- ESOR exchange programme for fellowships



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