On the occasion of the 70th anniversary of the Microbiology Society (formerly the Society for General Microbiology) I was asked in my capacity as Executive Editor for JMM Case Reports to comment on two of the most downloaded articles in JMM Case Reports.

This relatively new member of the Microbiology Society’s journal catalogue was launched in January 2014. Even though a number of microbiology journals welcomed case reports, there was an obvious gap in the market for a standalone journal. JMM Case Reports has a clinical focus, attracting international papers on a broad range of topics within both human and veterinary microbiology. JMM Case Reports is in online-only format, which facilitates open access, affordability and ease of searching by keyword, theme or region. Additionally, low article processing fees encourage worldwide submissions from medical practitioners and clinical microbiologists who lack institutional support for publishing case reports. The journal also offers Case Series, Case Reviews, round-ups of cases on a similar subject, Letters to the Editor, and interactive add-ons such as Case Quizzes and our forthcoming Image Gallery.

The immediate and worldwide success of JMM Case Reports since its launch has been largely down to its dedicated, international Editorial Board. The Board includes both microbiologists and clinicians, and both human and veterinary specialists from all over the world, providing a good reflection of the nationalities of potential submitting authors. Indeed, currently papers from more than 25 different countries have been submitted, with a remarkably high submission rate from India. The fact that both selected Case Reports are written by authors resident in India might therefore not be a coincidence.

Apart from the nationality of the authors, the selected Case Reports have more in common and both represent issues that are, in my opinion, of current and future importance in clinical microbiology.

Both cases report on infections due to rarely described or opportunistic pathogens. The number of such case reports is currently growing and will probably continue to increase dramatically in the (near) future, for several reasons. For one thing, the number of patients susceptible to infections with opportunistic or unusual pathogens is probably on the rise in various parts of the world. While the increase in the ageing population is a major issue in certain regions, vulnerable populations may also increase due to malnutrition, immunodeficiency disorders or other underlying conditions. On the other hand, the rapid evolution in (molecular) diagnostic techniques currently allows relatively cheap, fast and accurate identification of a wide range of bacteria, of which MALDI-TOF is the most obvious example nowadays. This results in the fact that all around the world, not only well-known pathogens, but also ‘unknown’ or rarely encountered bacteria can be correctly identified at a level that was impossible using basic biochemical identification methods in the past, as exemplified in both selected Case Reports. This is, however, no plea for abandoning basic microbiological techniques, such as careful examination and interpretation of growth media, basic biochemical testing or Gram staining. On the contrary, in times of increasing automation, these basic techniques and knowledge remain very important, and I am pleased to find that in both selected Case Reports the authors have taken the time to investigate and report...
basic bacterial features, in addition to using more advanced identification techniques.

A key benefit of the Case Report is encouraging the isolation, archiving and sharing with research colleagues of newly described organisms from a clinical case with unusual features.

As far as I see it, the same actually also applies to the clinical part of the Case Reports, or medical practice in general. A thorough anamnesis and basic physical examination are or should be the basis of all medical procedures in both human and veterinary medicine. It forces us to take time for our patients, and is therefore essential for creating a good doctor–patient or doctor–client relationship and helps in making fundamental short-term decisions. Anamnesis and physical examination data compel us to think in a structured way and provide signals that allow focusing when requesting more advanced investigations. In general, good anamnesis and physical examination are key factors in reducing overdiagnosis and overtreatment – two phenomena that are still quite prevalent in both human and veterinary medicine. One of the major down sides of overtreatment is of course antimicrobial resistance and this is one of the biggest challenges threatening global health. Both selected Case Reports describe issues of treatment failure. In the Case Report by Misra et al. (2014), this could be solved by removing the source of infection, while in the Case Report by Otta et al. (2014), a change in antimicrobial treatment, based on susceptibility testing, was the key to overcoming the infection. The importance of susceptibility testing, especially in populations at risk or in chronic or relapsed cases, cannot be overemphasized. To allow a meaningful interpretation of such susceptibility tests, well-defined breakpoints are necessary. This is a matter that is very relevant in veterinary medicine, even for well-known bacterial pathogens in various animal species. In human medicine, the lack of pathogen-specific clinical breakpoints is more limited to rarely isolated bacteria, but may still be quite important when one considers that the importance of opportunistic pathogens might increase in the future.

Even though both are human Case Reports, some exciting observations in veterinary medicine have already been published in JMM Case Reports. However, there is still room for improvement. I would like to take the opportunity to call on my fellow veterinarians or researchers in veterinary institutes to write down and share their most interesting findings with the scientific and clinical community, and submit them for publication in JMM Case Reports. Journals publishing both human and veterinary papers, such as Journal of Medical Microbiology or JMM Case Reports, provide a platform for expanding interdisciplinary collaborations and communications in all aspects of health care for humans and animals, as for example determined in the One Health initiative. Keeping the huge challenge of antimicrobial resistance in mind, close collaboration and the willingness to learn from each other is no frivolous luxury, but an absolute necessity.

To conclude, the selected Case Reports are inspiring because they describe unusual or opportunistic infections, they provide detailed information on both clinical presentation and bacterial identification, and they discuss antimicrobial treatment failure.

Finally, I would like to congratulate the JMM Case Reports Editorial Board and staff for the sensational start, and the Microbiology Society on the occasion of its 70th anniversary. I encourage the Society to continue for another 70 years publishing fascinating microbiology.

References
