Author's reply: "How much do plastic surgeons add to the closure of myelomeningoceles?"

Rhian Bevan¹ · Paul Leach²

Received: 11 April 2018 / Accepted: 25 April 2018 / Published online: 16 May 2018
© Springer-Verlag GmbH Germany, part of Springer Nature 2018

To the Editor:

We have read with interest the letter to the Editor in response to our article [1] reviewing the efficacy of having a plastic surgeon present at myelomeningocele (MMC) closures. We thank the author for their comments and we would like to make the following points.

Firstly, we would like to clarify that a plastic surgeon was surgically involved in all closures, although a more complex flap was performed in only 7/31 (22.5%) cases. We believe having both neurosurgical and plastic surgeons present at all MMC closures allows decisions on the method of closure to be made intraoperatively, on an individual basis, instead of being prejudged prior to surgery. The additional expertise of having a plastic surgeon involved in all cases contributes both experience and knowledge of tissue handling techniques. For example, utilising the lumbar perforating dissection technique to preserve vascular supply to wound edges, in addition to being able to transition to a more complex closure if required.

Dr Onyia comments that "50% of the complicated cases occurred in patients in whom plastic surgeons were involved while the remaining 50% of complications occurred in the patients in whom plastic surgeons were not involved, with just about the same type of complications occurring in both complication subgroups". The plastic surgeon was involved surgically in all closures and therefore this statement is incorrect. Our overall complication rate was 12.9% (4/31), which, as discussed in our paper, is in keeping with the current published literature. Two of these post-operative complications were cerebrospinal fluid (CSF) leaks, and it is difficult to attribute these to direct complications of wound closure.

Both patients responded immediately to ventriculo-peritoneal (VP) shunting, indicating that their CSF leaks were driven by hydrocephalus. Our centre operates a "watch and wait" approach to VP shunt insertion in patients with MMC to allow these children a chance of not having a VP shunt.

We agree with the notion that increased surgical experience should lead to an acceleration in skill development and therefore produce optimal complication rates. High volumes of MMC closures, as in the African studies [2–4], will undoubtedly lend itself to a quicker learning curve and therefore good results without necessarily involving a plastic surgeon. Nonetheless, it is difficult to compare our cohort with the African studies due to the vast differences in the patients, local expertise and the overall services provided.

We would like to thank both the letter author and the Journal Editor for the opportunity to be included in this discussion.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

References

1. Bevan R, Wilson-Jones N, Bhatti I, Patel C, Leach P (2018) How much do plastic surgeons add to the closure of myelomeningoceles? *Childs Nerv Syst* 34(4):737–740
2. Alatishe OI, Adeolu AA, Komolafe EO, Adejuyigbe O, Sowande OA (2006) Pattern and factors affecting management outcome of spina bifida cystica in Ile-Ife, Nigeria. *Pediatr Neurosurg* 42:277–283
3. Byabato S, Kiryabwire J, Galukande M (2012) Spina bifida cystic; features and early postoperative outcomes and experience in Kampala. *Ann Afr Surg* 9:20–26
4. Komolafe EO, Onyia CU, Ogunbameru IO, Dada OA, Owagbemi OF, Ige-Orhionkpaibima FS, Olarewaju OA, Obamwonyi EO, Abdullahi MJ (2017) The pattern, peculiarities, and management challenges of spina bifida in a teaching hospital in Southwest Nigeria. *Childs Nerv Syst* 32(2):311–391

✉ Rhian Bevan
bevanr8@cardiff.ac.uk

¹ University Hospital of Wales College of Medicine, Cardiff, UK

² Department of Paediatric Neurosurgery, University Hospital of Wales, Cardiff, UK