J. Jacob and N. R. Clay
Glan Clwyd Hospital, Denbighshire, Wales
E-mail: jaganjacob@gmail.com

The authors of the published paper chose not to reply but appreciate this presentation of a new technique.

doi: 10.1177/1753193410367700 available online at http://jhs.sagepub.com

Dear Sir,

Re: Takagi R, Kawabata H, Matsui Y. Thumb polydactyly with symphalangism in young children. J Hand Surg Eur. 2009, 34: 800–4.

I read with interest the article by Takagi et al. (2009) and commend the authors for presenting their experience. However, the authors' claim that their publication is the first report of thumb polydactyly with symphalangism in young children is incorrect as this has been described previously (Dobyns et al., 1985; Islam and Fujita, 1991; Horrii et al., 1997).

Dobyns et al. (1985) did not use the term symphalangism but they have described a girl with thumb polydactyly with no motion at the interphalangeal joint of the radial component. Islam and Shinya (1991) performed an anatomic study on 24 surgically resected thumb polydactylies with triphalangism. Two cases presented three phalanges but had absent metacarpophalangeal joint formation and 17 did not have a distal interphalangeal joint.

Horrii et al. (1997) subclassified the Wassel (1969) type IV duplicated thumbs to account for the bifurcation at the metacarpophalangeal joint. Some of their patients had a triphalangeal component. Of 175 children, ten cases had a cartilaginous connection between the radial supernumerary digit and the thumb metacarpal. Rad and Afshar (2008) have reported a case of thumb polydactyly with symphalangism at the interphalangeal joint of the radial component.

In a young child with a skeletally immature hand symphalangism may be inferred from narrowed joint space and limited motion (Afshar, 2010). Zuidam et al. (2008) in a recently proposed classification for the thumb polydactyly have assigned a nomenclature for symphalangism. Horrii et al. (1997), Islam and Shinya (1991), and Afshar (2007) have reported concurrent existence of symphalangism with triphalangeal thumb polydactyly. The authors, Takagi et al. (2009), have also presented in Fig 2 of case 5 thumb polydactyly with triphalangeal radial component and narrowed MP joint space.

I would like to know from the authors:

Did the other patients have triphalangeal components?

Do the authors have any opinion about the concurrent existence of symphalangism with the triphalangeal thumb polydactyly?

Although most hand surgeons consider thumb polydactyly with symphalangism to be a rare congenital anomaly, it is probably not as rare as has previously believed given the above evidence.

Conflict of interests

None declared.

References

Afshar A. Thumb duplication with symphalangism at the metacarpophalangeal joint. J Hand Surg Eur. 2007, 32: 595–6.
Afshar A. Congenital hand differences. J Hand Surg Am. 2010, 35: 164.
Dobyns JH, Lipscomb PR, Cooney WP. Management of thumb duplication. Clin Orthop Relat Res. 1985, 195: 26–44.
Horrii E, Nakamura R, Sakuma M, Miura T. Duplicated thumb bifurcation at the metacarpophalangeal joint level: factors affecting surgical outcome. J Hand Surg Am. 1997, 22: 671–9.
Islam S, Shinya F. Triphalangism in thumb polydactyly: an anatomic study on surgically resected thumbs. Plast Reconstr Surg. 1991, 88: 831–6.
Rad IA, Afshar AR. Unusual constellation of anomalies in maternal diabetes syndrome: bifurcated distal phalanx of the thumb, cleft lip, and patent dactus ateriosus. Iranian J Publ Health. 2008, 37: 138–41.
Wassel HD. The results of surgery for polydactyly of the thumb. Clin Orthop Relat Res. 1969, 64: 175–93.
Zuidam JM, Selles RW, Anata M, Runia J, Hovius SFR. A classification system of radial polydactyly: inclusion of triphalangeal thumb and triplication. J Hand Surg Am. 2008, 33: 373–7.

Dr Ahmadreza Afshar, MD
Department of Orthopaedic Surgery
Urmia University of Medical Sciences
Urmia, Iran
E-mail: afshar_ah@yahoo.com

Reply

Dear Sir,

Re: Takagi R, Kawabata H, Matsui Y. Thumb polydactyly with symphalangism in young children. J Hand Surg Eur. 2009, 34: 800–4.

Many thanks for your interest in our article and suggestions to refine the results. Our paper was first submitted in July 2007 and accepted in March 2008. Since then as you pointed out, other papers have also described this. We have also seen three novel

cases with metacarpophalangeal type thumb polydactyly with symphalangism. Including these cases, all metacarpophalangeal type symphalangism we saw had a triphalangeal component. The proximodistal axis is probably involved in the genesis of symphalangism as is the triphalangeal thumb. Then concurrent existence of these two anomalies is thus understandable. Finally we agree with you that thumb polydactyly with symphalangism is more common than previously understood.

Hidehiko Kawabata, MD
Chief Director, Department of Orthopaedic Surgery
Osaka Medical Center and Research Institute for
Maternal and Child Health, Japan
E-mail: hk@mch.pref.osaka.jp

doi: 10.1177/1753193410363958 available online at http://jhs.sagepub.com