Objective: Amniotic band syndrome (ABS) is a rare congenital abnormality with a wide spectrum of presentations and is easily missed by ultrasound. Therefore, we attempted to find the reason for missed diagnoses and how to address it. Methods: We conducted a retrospective analysis of cases of missed diagnoses by ultrasound with pathologically confirmed ABS from a single, tertiary referral centre from 2002 to 2016. Results: Twelve patients were enrolled, including 8 (8/12, 66.7%) cases of foetuses that were alive with severe abnormalities, 3 (3/12, 25%) cases of stillbirth, and 1 (1/12, 8.3%) case of finger amputation found after birth. The amniotic band located at the head or amniotic cord is the main reason for missed diagnoses (p=0.00) compared with diagnosis by ultrasound (p=0.00), followed by the amniotic band located at the abdomen (p=0.05) and a single extremity (p=0.11). Multiple abortions, surgical abortion and the attachment of the amniotic band to the cord may account for intrauterine foetal death (IUFD) with ABS, though we cannot perform statistical analysis due to the small sample size. Multiple risk factors and reasons for missed diagnoses are discussed.

Conclusion

Although ABS is an easily missed diagnosis, we should have the essential information and as much knowledge as possible. We should also highly suspect ABS when multiple, severe, atypical and asymmetric defects are detected, especially when the mother or foetus exhibits some of the risk factors.