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A Rare Congenital Shoulder Dislocation(Alkarama Case Report).

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I. Introduction:

Shoulder is the most common joint to be dislocated, with a rate of around 23.9 per 100,000 people a year [1] due to many precipitating factors like:

a very wide range of motion, and the shallow bony articulation, or other underlying conditions like ligaments laxity or bony dysplasia.

The dislocations can be classified according to the:

- 1- Direction of displacement into anterior, posterior, and inferior.
- 2- Onset to acute and chronic.
- 3- Pathology into traumatic and non traumatic.

Shoulder dislocations in infants are extremely rare most of these children and infants have generalized ligaments laxity, In young subjects with an immature skeleton, physes remain open and shoulder injury may lead to physeal or metaphyseal fractures rather than dislocation[2].

There are three types of congenital shoulder dislocations:

- (a) true congenital dislocation developing in utero.
- (b) traumatic birth directly causing dislocation.
- (c) dislocation acquired secondary to a brachial plexus injury.[3].

The true congenital dislocations are the least common one.

II. Case Presentation:

One day old female referred to our orthopedics department in alkarama teaching hospital from the pediatric surgical department with loss of her left shoulder joint movement, immediate after planned cesarean section delivery after uneventfully full term pregnancy due to small mother pelvis, during taking the history from the mother there was no history of any infection or current illnesses during pregnancy and there is no drug intake apart from ferrofolic capsules intake during the pregnancy as a tonics, there was no past medical or surgical history, family history of relative parents without any previous congenital problems.

On examination: the infant had no obvious anomalies, her left shoulder was internally rotated and fixed to the chest but not in typical; (waiter tip) Erb's palsy position.

X ray: shows abnormal left shoulder articulation as proximal humeral end lies inferiorly to the glenoid fossa (fig.1).

Immediate we started to the trial of reduction in the beginning we used Kocher's method we bent the elbow 90 degree and hold close to the body; no traction applied. The arm is rotated 75 degree laterally then the point of the elbow is lifted forward, finally the arm rotated medially.

The infant started to move her arm immediately after this maneuver confirmed by moro reflex test.

We did a new x ray film but the joint was still unreduced, we did anther trial with reduction by Kocher's method again, and we tight her arm in internal rotation and forearm on the chest and hold it by traditional swaddles.

Next day we repeated the X ray film but still it was out (fig 2), now we tried Hippocratic method, we gently increasing the traction applied to the arm in slightly abduction shoulder and thumb of the assistant applied countertraction.

The last x ray shows reduction of the dislocation and we kept the arm in the swaddles with arm in internal position for 3 weeks.

Anther finding was detected that the heart in the right side (fig 3), we send her to the pediatric department to exclude other congenital internal organs which they found nothing apart from the heart problem. We fellow her up to 6 months and she returned back normally.

III. Discussion:

Although the true congenital shoulder dislocations are extremely rare, it's important to examine all new born babies to roll out any anomalies.

Our case had no possibility of birth trauma according to her gynecologist operative notes, the operation was straight forward apart from one finding that confirmed the umbilical cord was around the baby neck when she delivered her, we looked back to the old ultrasound report nothing was mentioned about this, which make the idea of developmental causes than the traumatic one, with the present of anther congenital anomalies raising the idea of true congenital dislocation this case up to our knowledge there is no previous article in Iraq was mentioned it before.

We try to do ultrasound assessment to the shoulder joint to identify any physeal injuries or glenoid defects but unfortunately was beyond our available facilities at that time.

IV. Conclusion:

Up to our knowledge this the first case reported in our country, we found another article that had the same story that they found in there review 12 cases of true congenital dislocation 2 of them only were cesarean deliveries[4]

Our results goes with that True congenital dislocation of the shoulder is thought to be a result of in utero maldevelopment to bony abnormalities of the shoulder girdle[5].

References

- [1]. Leroux T., Wasserstein D., Veillette C., Khoshbin A., Henry P., Chahal J., Austin P., Mahomed N., Ogilvie-Harris D. Epidemiology of primary anterior shoulder dislocation requiring closed reduction in ontario, canada. Am. J. Sports Med. 2014;42:442–450. doi: 10.1177/0363546513510391.
- [2]. Li X., Ma R., Nielsen N.M., Gulotta L.V., Dines J.S., Owens B.D. Management of shoulder instability in the skeletally immature patient. J. Am. Acad. Orthop. Surg. 2013;21:529–537.
- [3]. Whitman R., VIII The treatment of congenital and acquired luxations at the shoulder in childhood. Ann Surg. 1905;42(1):110–115.
- [4]. Congenital anterior shoulder dislocation in a newborn treated with closed reduction
- [5]. Casey Slattery, BS, Medical Student, Boris Kovalenko, MD, Orthopedic resident, and Kushagra Verma, MD MS, Assistant Professor of Spine and Scoliosis Orthopedic Surgeon; Radiol Case Rep. 2018 Oct; 13(5): 920–924. Published online 2018 Jul 18.
- [6]. Heilbronner DM. True congenital dislocation of the shoulder. J Pediatr Orthop. 1990;10(3):408–410.



Fig. 1



Fig. 2



Fig. 3

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