

A 2-month-old girl is brought to the office by her father for a well child visit. He is concerned about right-sided flattening of the back of his child's head that he noticed 3 weeks ago. The patient also seems to prefer turning her head to the right while tilting her head to the left. She was born full-term via Cesarean delivery for breech positioning. She is breastfed exclusively and receives vitamin D supplementation. She is placed to sleep on her back as instructed, and her parents have not yet started "tummy time" since they are nervous she may fall asleep. The patient spits up frequently and appears most comfortable when held upright after feeding. Physical examination reveals flattening of the right occiput with anterior displacement of the right ear and forehead. Her head is turned to the right, and there is a palpable, firm mass that does not transilluminate in the inferior portion of the left side of the neck. The patient's hips are stable with no clicks or clunks. Which of the following is the most likely underlying cause of this patient's presentation?

- ☐ A. Congenital lymphatic malformation
- ☐ B. Fracture of the clavicle
- ☐ C. Premature closure of a cranial suture
- ☐ D. Postural deformity of the neck
- ☐ E. Tumor of posterior fossa



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- ☐ A. Congenital lymphatic malformation [25%]
- ☐ B. Fracture of the clavicle [6%]
- ☐ C. Premature closure of a cranial suture [10%]
- ☒ D. Postural deformity of the neck [50%]
- ☐ E. Tumor of posterior fossa [9%]

[Proceed to Next Item](#)**Explanation:**

User Id: [REDACTED]

## Congenital torticollis

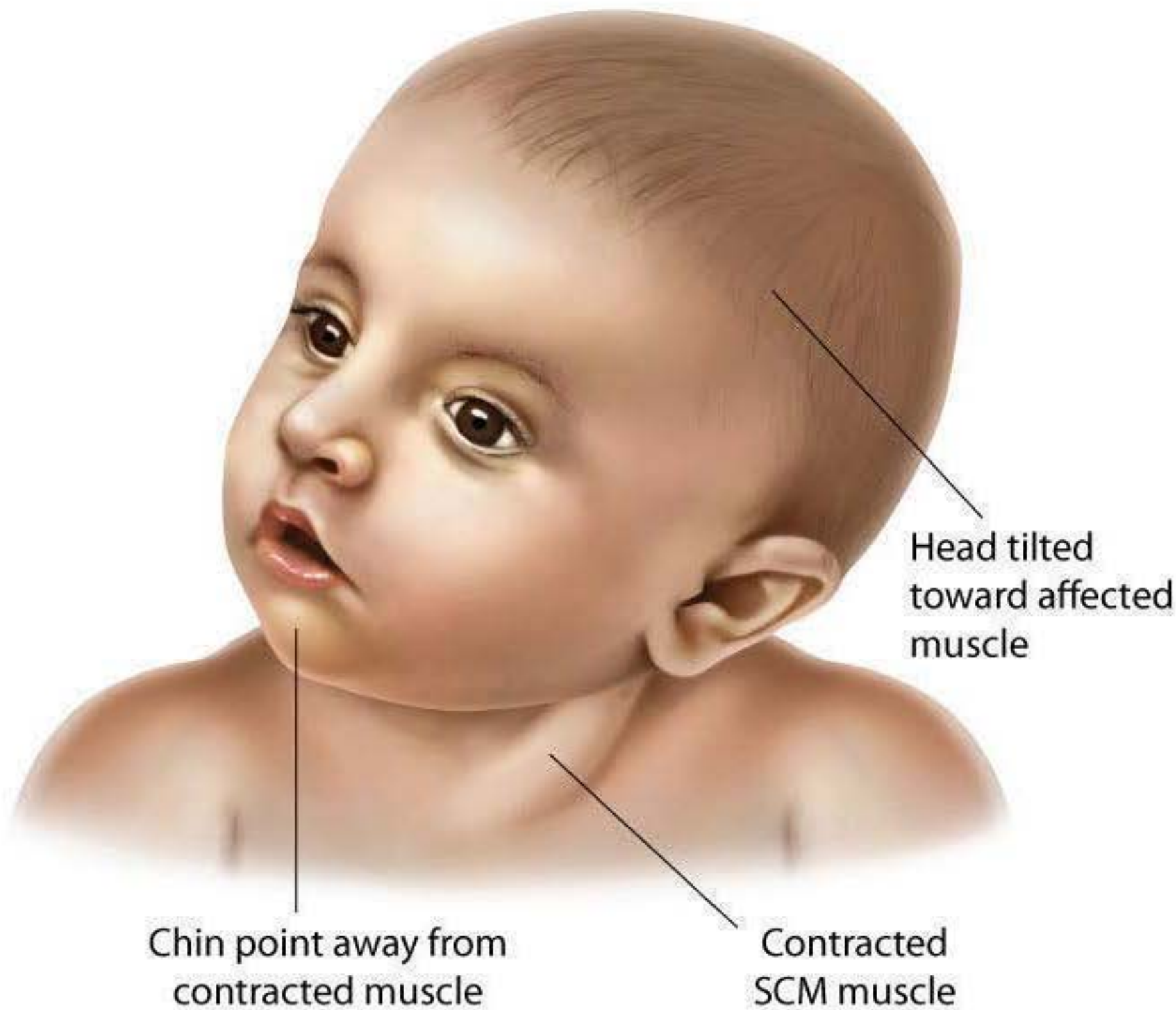




Explanation:

User Id: [REDACTED]

## Congenital torticollis



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This infant presenting with a neck mass and **head tilt to one side** with **chin deviation to the other** has **congenital muscular torticollis (CMT)**. CMT is a **postural deformity** that typically presents between age 1-6 months with limited range of motion of the neck. Physical examination may reveal a palpable, well-circumscribed **mass** that does not transilluminate in the inferior portion of **sternocleidomastoid muscle**.



contracted muscle

SCM muscle

©UWorld

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Risk factors for CMT are related to crowding in the uterus, such as multiple gestation, breech positioning, and oligohydramnios. Associated conditions, which are also likely related to intrauterine positioning, include developmental dysplasia of the hip, metatarsus adductus, and clubfoot. Treatment strategies include positioning (eg, increased tummy time), passive stretching, and physical therapy. Missed or delayed diagnosis may lead to craniofacial asymmetry. Flattening of the head with ipsilateral anterior displacement of the ear and forehead, known as **positional plagiocephaly**, is also a common consequence of CMT.

**(Choice A)** Cystic hygromas are congenital malformations of the lymphatic system and are located in the posterior triangle of the neck. They are often detected prenatally and have a high association with aneuploidy. Postnatal examination would reveal a fluctuant mass that transilluminates.

**(Choice B)** Clavicle fractures are associated with difficult vaginal deliveries (eg, shoulder dystocia) and presents with crepitus, swelling, and decreased range of motion of the ipsilateral upper extremity. Clavicle fractures do not affect the neck.

**(Choice C)** A normal newborn skull has **sutures and fontanelles** to accommodate brain growth. Craniosynostosis (premature closure of cranial sutures) results in skull deformity, but a neck mass and limited range of motion would not be seen.

**(Choice E)** Acquired torticollis from a posterior fossa tumor is extremely rare and may present with a head tilt secondary to tonsillar herniation or compensation for visual disturbances. A brain mass can cause vomiting, but this patient's spit up is consistent with physiologic reflux.

#### Educational objective:

Congenital muscular torticollis is a postural neck deformity that presents with a sternocleidomastoid muscle mass, ipsilateral head tilt, and contralateral chin deviation. Limited range of motion of the neck increases the risk of positional plagiocephaly.

#### References:

1. Congenital muscular torticollis and positional plagiocephaly.



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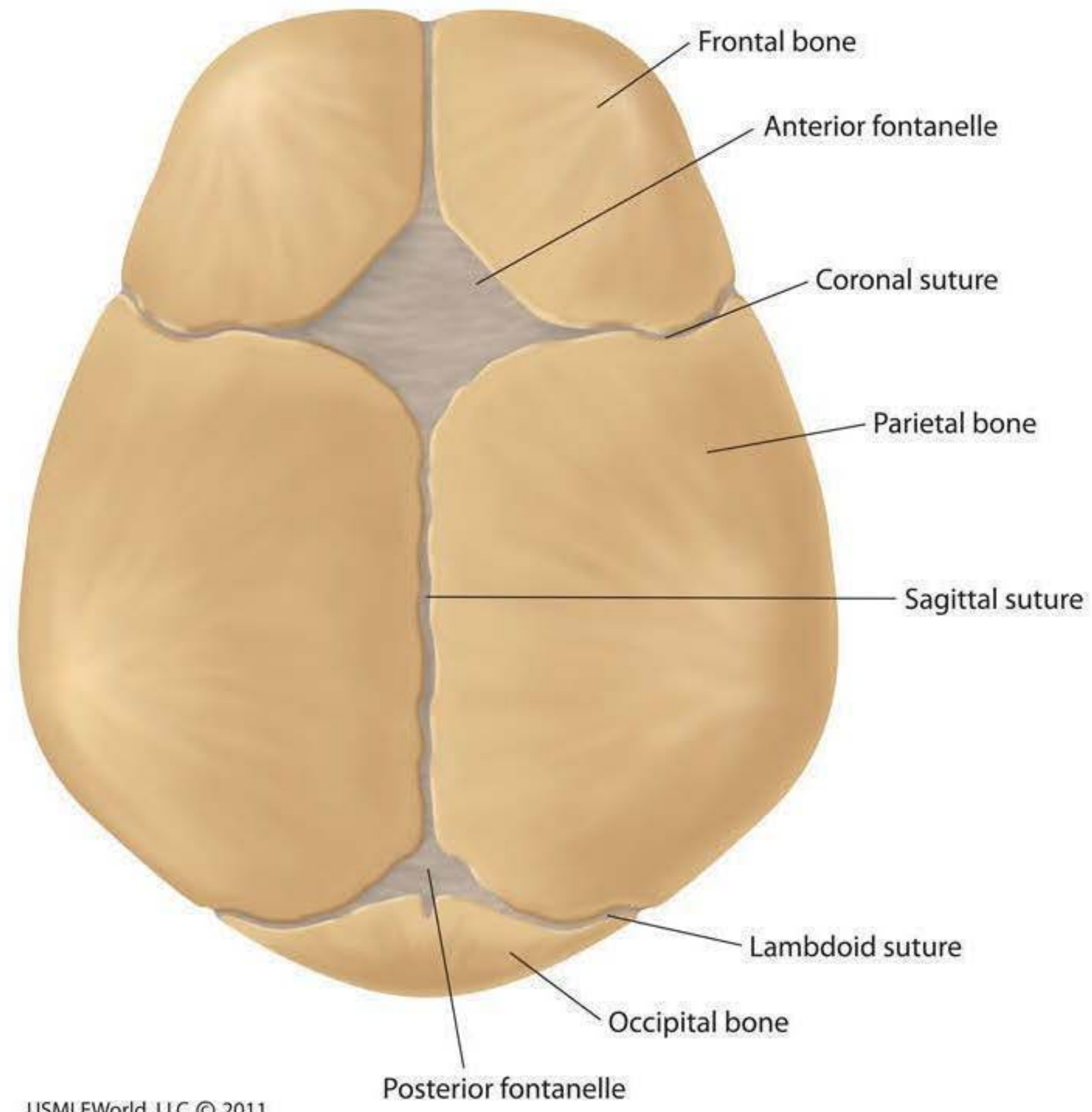
1. [Congenital muscular torticollis and positional plagiocephaly](#)
2. [Physical therapy management of congenital muscular torticollis: an evidence-based clinical practice guideline: from the section on pediatrics of the American Physical Therapy Association](#)



Media Exhibit

skull, superior view

Newborn skull, superior view



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