

*Marie Biancuzzo's*

# **Guide to Decoding Lactation Photos**

**A Continuing  
Education  
Workbook**



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Gold Standard Publishing

**Graphics and Layout:** *Breastfeeding Outlook*

Cover Design: *Breastfeeding Outlook*

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ISBN 978-1-931048-60-6

10 9 8 7 6 5 4 3 2 1

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## Chapter 3

# Infant Orofacial Assessment and Feeding Reflexes

Assessment is a major part of any expert's role. Yet, assessment is only helpful when the pertinent data are identified and interpreted. When helping mothers and infants, we can look at information from laboratory and diagnostic tests, interviews, and health histories. But these provide only part of the story. Physical assessment data are critically important when formulating a plan to meet a goal.

When you collect the pertinent data and correctly interpret it, you are much more likely to take the right action or actions to help the breastfeeding family. Sometimes, it may be as simple as reassuring the family that all is well. Other times, it may mean making minor or major adjustments in the feeding plan, or referring the family to a health care provider.

In Chapter 3 of *The Breastfeeding Atlas*, you'll see many photos that will show you the details that differentiate between typical normal conditions, normal variations, and abnormal infant conditions. By studying the photos, considering the context of each situation, and completing the written learning exercises, you will develop the skills to recognize and manage such situations in real life—or on your lactation exam!

I promise, when you finish this chapter, you will be able to determine when it is appropriate to reassure, resolve, or refer the family for congenital oral (and other) anatomical variations in the infant that may (or may not) impact breastfeeding. This topic can feel a little daunting at first, but I'll show you exactly what to look for, and the questions to ask yourself as you look at certain conditions.

### Objectives

---

Given a clinical photo, you will be able to:

- Recognize bony, soft tissue, and neuromuscular alterations of the intraoral and extraoral structures that can affect latch, positioning, and milk transfer.
- Recognize key features of pigmented and vascular birth marks, and describe how they affect your responsibility to help the breastfeeding family.
- Name at least six different types of birthmarks, and recognize how they may affect health or feeding (if at all).
- Describe assessment techniques and findings that indicate optimal or suboptimal functioning of (1) seal of the lips, (2) negative intraoral pressure, and (3) mandibular (jaw) compression of the nipple.

## Key Terms

- asymmetry
- buccal mucosa
- craniosynostosis
- frenum (frenulum)
- gag reflex
- hard palate
- hemangioma
- hypertonic, hypertonia
- hypotonic, hypotonia
- lesion
- mandible
- maxilla
- melanin
- melanocytosis
- micrognathia
- natal tooth
- nevus, nevi
- pigmentation
- plagiocephaly
- protrusion
- retrognathia
- retrusion
- soft palate
- symmetry
- tone (tonus)
- torticollis



Review Learning Exercise 3-1 to familiarize yourself with the vocabulary and then complete the exercise after reading the chapter.

## Data Gathering and Assessment

Data gathering includes reviewing medical records, interviewing the parents, and more. But it also involves physical assessment—and recognizing clues you need to help the breastfeeding family in situations that are normal, variations of normal, or abnormal.

**Visual inspection** is perhaps the most commonly used means to obtain physical assessment data related to feeding issues. Throughout this chapter, we will focus on visual cues about structure and function and their role in transferring milk from the breast.

**Palpation** is using one's hands to gain information about a body structure. Palpation can be used to determine whether a structure is intact (for example, a cleft of the palate means the palate is not intact), or to determine a structure's size, shape, firmness, or location. However, knowing when and how to palpate the infant's oral cavity can be tricky. While all newborns should have a thorough oral examination by the physician prior to being discharged from the hospital, additional assessment may be needed later. But because the oral cavity is a highly sensitive part of a newborn's body, he is likely to perceive the oral assessment as intrusive and unpleasant, (**Figure 5** in Chapter 2) and his feeding behavior may be compromised afterwards.



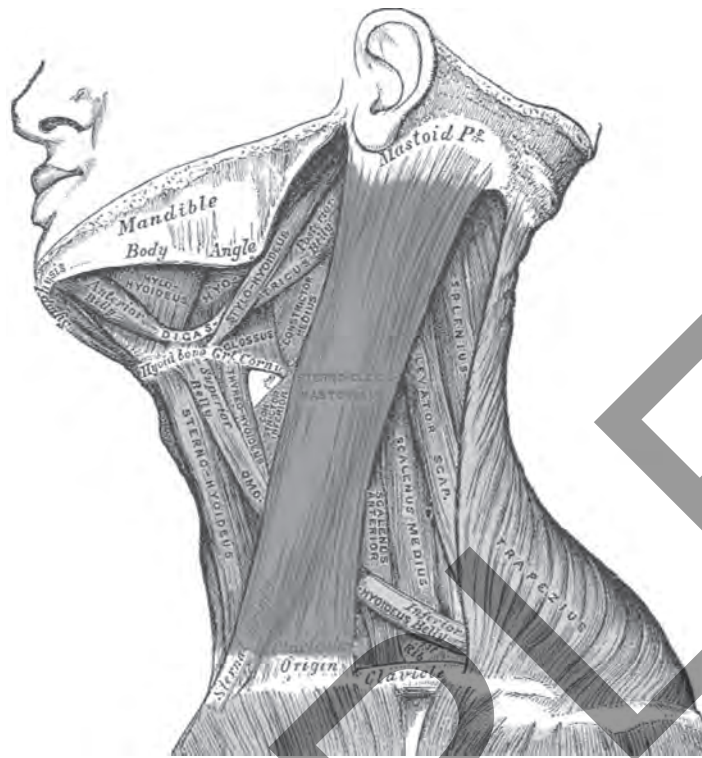


Figure 3-2. The sternocleidomastoid muscle.

## Neck

A large, strong, paired muscle in the neck contracts and pulls the head towards one side. This is the sternocleidomastoid muscle (SCM). Its name comes from its origin and insertion sites, since it originates at the manubrium of the sternum and the clavicle, and inserts at the mastoid process of the temporal bone, as shown in Figure 3-2 above. It is innervated primarily by Cranial Nerve XI, the spinal accessory nerve.

Congenital muscular *torticollis* is a stricture of the sternocleidomastoid muscle (SCM). Commonly known as a “wry neck,” *torticollis* is characterized by the stricture of the muscle such that the infant’s head is tilted to one side. Often, the stricture of this muscle is attributable to the position the infant assumed in utero. About 75% of the cases of *torticollis* pull the infant’s head to the right, although this is not always the case (**Figure 53**). In my experience, *torticollis* can range from the obvious to the subtle, and may be overlooked. Sometimes, the best (or only!) tell-tale sign of *torticollis* is the infant’s behavior at his mother’s breast. Frequently, infants who have *torticollis* also have plagiocephaly.

Because of the stricture of the SCM muscle, the infant does not have good range of motion in his neck. As a result, his chin is always pointing more to one side than to the other. He may be perfectly happy to nurse on one side, and the mother may experience no nipple pain in this position. However, when offered the other breast, the infant may seem reluctant, cry, or appear to be in pain. Often, the mother will experience nipple pain when nursing on that side.

There are several different opinions about what position to use in these cases, some of which are mentioned in *The Breastfeeding Atlas* or elsewhere.<sup>7</sup> I espouse two general principles that tend to work: biological nurturing<sup>8</sup> (or so-called “laid back” nursing, a somewhat inaccurate

## Master Your Vocabulary

Unless you know the meaning of a word, you cannot fully answer a question about it. Those listed under “key terms” are only a small representation of the words that you might need to know in clinical practice or on the exam. If there are any others that you do not know, you need to look them up now!

### Learning Exercise 3-1. Vocabulary related to data-gathering, assessment for skin and orofacial structure and function.

*Instructions: Write the letter of the correct match next to each item. Answers are in the Appendix.*

- |                            |  |
|----------------------------|--|
| _____ 1. asymmetry         | A. pigmented birthmark                                     |
| _____ 2. buccal pads       | B. cheeks  |
| _____ 3. craniosynostosis  | C. lower jaw   |
| _____ 4. frenum (frenulum) | D. vascular birthmark                                      |
| _____ 5. hemangioma        | E. e.g., a backward movement of the mandible               |
| _____ 6. hypertonic        | F. muscle tension at rest                                  |
| _____ 7. hypotonic         | G. overly limp   |
| _____ 8. lesion            | H. position of the mandible in relation to the maxilla     |
| _____ 9. mandible          | I. small fold of tissue that secures an organ              |
| _____ 10. maxilla          | J. the upper jaw   |
| _____ 11. melanin          | K. early closing of newborn skull sutures                  |
| _____ 12. micrognathia     | L. a small mandible  |
| _____ 13. natal tooth      | M. similar on both the right and the left                  |
| _____ 14. nevus            | N. dissimilar from right to left                           |
| _____ 15. protrusion       | O. stricture of the sternocleidomastoid muscle (SCM)       |
| _____ 16. retrusion        | P. discontinuity of tissue, or loss of function            |
| _____ 17. retrognathia     | Q. a tooth present at birth                                |
| _____ 18. symmetry         | R. overly tense  |
| _____ 19. tone, tonus      | S. the pigment that gives skin, hair, and eyes their color |
| _____ 20. torticollis      | T. e.g., a forward movement of the mandible                |

### Learning Exercise 3-3. Comparison of major differences between craniosynostosis and plagiocephaly

*Instructions: On the table below, summarize the difference between craniosynostosis and plagiocephaly. Answers are in the Appendix.*

	Craniosynostosis	Plagiocephaly
fusion of the skull?		
how common		
effects		
usual intervention		
treatment practitioner?		

### Learning Exercise 3-4. Comparison of Mongolian slate blue spots and indicators of bruising related to physical abuse.

*Instructions: Go back and look at the text descriptions of Mongolian spots, and fill in the appropriate column with a few words. Then, using sources from outside, write descriptions about bruising. If you are uncertain about child abuse, consider taking a short course. (A list of available courses, some free, is available at [http://www.keepkidssafe.pa.gov/cs/groups/webcontent/documents/document/c\\_124444.pdf](http://www.keepkidssafe.pa.gov/cs/groups/webcontent/documents/document/c_124444.pdf))*

	Mongolian spot	Bruising
Color		
Color changes		
Location		
Flat or raised?		
Size		
Shape		
Onset/resolution		
Other characteristics?		

## Summarize What You've Learned

The purpose of this chapter was to help you distinguish between reassuring and worrisome factors when viewing samples of colostrum or human milk at different stages of lactogenesis.

Sometimes, the type of information in this chapter can seem much more theoretical than clinical. Take a moment to summarize: How can you arrange the most salient points into a few bullet points? How will you use this information for individual clients in your clinical practice? How might this information be important in the bigger world of system-level changes (e.g., procedures, standing orders, etc.) or issues with populations of clients (e.g., writing patient education materials.)



Main Points



On the test



On the job

## Self-Assessment

People often dive into a test before they have thoughtfully reflected on how well they have prepared for it. Instead, it would be helpful if they would take a few moments to give their alter-ego (their “other self”) a chance to reflect on how confident they feel about mastering the stated objectives.

*Instructions: Take a moment to review the chapter objectives (below). Then rate yourself. How confident are you that you have achieved each objective below?*

Objective	Highly Confident	Somewhat Confident	Somewhat Unsure	Completely Unsure
State the definition for at least 10 terms related to milk production, including those related to stages of human lactation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name at least two reasons why lactogenesis I may not occur at all.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
List at least eight reasons why a mother might experience a delay in lactogenesis II.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Describe onset, color, consistency, and volume of human milk as it relates to lactogenesis I, lactogenesis II, and lactogenesis III.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relate the differences in milk color, consistency, and volume to clinical implications for counseling and anticipatory guidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

On the next page, you will see some simple recall questions pertaining to this chapter. These are *not* the application-type questions you will find in the IBLCE exam. However, you cannot *apply* information unless you can fully *recall* that information! You should do these without looking up the answers.

When you finish with the quiz, look up the answers in the Appendix. Then, score your answers, using the Appendix. Finally, you should analyze the results of your quiz. It's not enough to just know what you got right or wrong; you must look at why you got the answers right.

## Quick Quiz Chapter 5

*Instructions: Circle the correct response. For a better understanding of how well you are mastering the material, try answering without looking it up. If you are really stuck, questions come from this workbook and from **The Breastfeeding Atlas** so go back and review the appropriate material. Answers are in the Appendix.*

1. Of these descriptors for colored milk, which would be the MOST worrisome?
  - A. bright pink
  - B. light brown
  - C. light green
  - D. rusty orange
  
2. Of these situations, which is most in need of further follow-up?
  - A. Milk from one breast is a slightly different color than milk from the other breast.
  - B. The volume of milk from one breast is twice as much as from the other breast.
  - C. Milk collected in the morning has greater volume than that collected in the evening.
  - D. Milk expressed on Day 3 looks different from milk collected on Day 2.
  
3. On Day 1, a primiparous mother is preparing to express her milk. She is worried about how much she will obtain. You tell her that in one “sitting” it is likely that she will get:
  - A. 25-30 ml.
  - B. 15-24 ml.
  - C. 8-15 ml.
  - D. 7-14 ml.
  - E. < 7 ml, and maybe only drops.
  
4. A mother who delivered her infant less than 24 hours ago has expressed the milk shown in **Figure 76**. The amount of milk she has obtained is:
  - A. about as much as might be expected.
  - B. more than might be expected.
  - C. less than might be expected.

## Exploring What You've Learned in a Journal

Multiple studies have shown the benefits of using a learning journal. Among them are greater assimilation and integration of new information, better long-term retention of course concepts, increasing test and exam grades, and a means by which to have continuous feedback about one's own learning.

- Name at least three things you learned from this chapter.
- List at least three things you still need to learn, or more fully master, in this chapter. Briefly describe how this information fits (or doesn't fit) with what you've seen in clinical practice, what you learned in basic or college courses, or what you've observed in your own experience breastfeeding. (In some cases, you might want to include how the information fits or doesn't fit with what "experts" say, what the media says, or whatever.)
- Describe how you will use any or all of this information. How might it be related to problems and potential solutions that occur in real life or in clinical situations?
- If you wish, include how you felt about learning this information. Were you bored? Overwhelmed? Enlightened? Worried? Something else?