

## VIEWER'S CHOICE

### The right formula for diagnosis

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The diagnosis of certain diseases has become easier with the advent of imaging studies and tests for certain hematologic markers; however the role of detailed history-taking and examination has not lost its importance. Laboratory and radiological tests provide little or no information about behaviors or actions. The following case report brings attention to an out of the ordinary complication of infant feeding, and highlights the power of "old-fashioned", but time proven diagnostic methods.

A panicked mother brought her 3-month-old boy to the office due to an odd complaint. She reported that while feeding her baby, the formula in the bottle suddenly changed to "strawberry milk". She pulled the nipple from his mouth and saw a drop of blood on his lip. The mother reports no history of trauma or any past history of bleeding disorders. Exam of the infant was notable only for a sucking callus on the upper lip. Labs were drawn and the CBC, PT, and PTT were normal. Stool was negative for blood. The infant was admitted overnight to the hospital with no further events observed.

Two weeks after the initial office visit, the mother returned to the office reporting that the milk was again changing color. This had occurred several times over the preceding two days. Again, she was convinced that she saw blood on the baby's lip. Examination of the face and mouth showed no obvious lesions other than the feeding callus. The mother was asked to feed the infant with the formula while being observed. The infant took the entire nipple and demonstrated a strong and vigorous suck. While feeding, it was noted that the upper lip was pulled into and pinched by the nipple's vented slit. After a few minutes, the formula abruptly turned bright pink. An immediate examination of the upper lip revealed a tiny, loose flap of skin on the sucking callus that was not previously noted.

Questioning revealed that in the hospital the mother did not have any of her own feeding supplies and instead used a box of traditional "natural" bell nipples provided by the nursing staff. She continued to use these nipples until they were used up, and then switched back to her usual brand, the NUK® Orthodontic Body Vent Nipple (Gerber; Fremont, MI). The change in color of the formula occurred only when using the vented nipple.

To see if the bleeding could explain the color change, an experiment was performed. Blood was drawn from a nurse and added drop by drop to a row of formula samples. All samples turned bright strawberry-pink after only 2-3 drops. The mother was instructed to change to a non-vented nipple. There have been no further episodes.

#### Conclusion:

In addition to bringing to attention an unusual injury caused by a commonly used commercial nipple, this simple case illustrates the importance of observation, especially when diagnosing an unconventional clinical complaint. In this case, it was important to ensure that all variables were kept constant to arrive at correct diagnosis. It was this attention to detail that solved the mystery of the "strawberry milk".

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