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ANSWER KEY

# PIR QUIZ

1. Mrs. Smith is a healthy, 26-year-old female who is in the first trimester of her pregnancy. Her obstetrician has referred her to you for a “get acquainted” visit. Mrs. Smith tells you that two of her close friends have babies who developed atopic dermatitis. She believes her husband had eczema in infancy. She wonders if there are precautions she should take with her baby. You advise her that the most important course for her to take would be to:
   A. Add meats, vegetables, and non-citrus juice to the child’s diet at monthly intervals starting at 12 months of age.
   B. Add rice and wheat cereals to the child’s diet at 6 months of age.
   C. Avoid cow milk, soy products, egg, and wheat in her diet during the remainder of her pregnancy.
   D. Breastfeed her baby for at least 6 months.
   E. Supplement her baby’s diet with soy-based milk at 6 months of age.

2. Kenny B is a 2-year-old male who has rhinitis frequently and has had occasional ear infections. He was breastfed until 6 months of age and then was placed on homogenized milk. He eats cereal, egg, some meats, vegetables, and fruits. His parents feel his appetite is normal for his age. He has his own bedroom. Both of his parents have a history of allergic rhinitis. They wonder if there are things they can do to relieve or avoid a similar problem for their son. You advise them that the most helpful action they can take is to:
   A. Begin prophylactic antibiotic therapy.
   B. Change his milk to a soy-based product.
   C. Delay plans for child care.
   D. Make his bedroom dust- and mold-free.
   E. Restrict egg, wheat, orange juice, and peanuts in his diet.

3. Karen is a 6-year-old African-American girl who has been having increasingly frequent bouts of mild wheezing without fever. Her mother feels Karen’s appetite and diet are normal for her age. Karen seems to have little trouble while playing out of doors. Her mother feels that her wheezing began at about the time she started first grade. In taking further history, you especially would be interested in knowing about:
   A. Any family history of similar symptoms.
   B. Any family pets.
   C. Karen’s school problems.
   D. The mother’s health during pregnancy.
   E. The relationship of ingestion of specific foods to symptoms.

4. The factor most clearly predictive of an increased risk of atopic disease in the newborn is:
   A. Bilateral atopic parentage.
   B. Formula feeding rather than breast-feeding.
   C. Mother’s dietary history during pregnancy.
   D. Presence of indoor pets.
   E. Status of bedroom environment.

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# DEPARTMENT OF CORRECTIONS

**Erratum**

There is an incorrect dosage in the article Cervical Adenopathy that appeared in the July 1994 issue. In Table 10 on page 283, the correct treatment for documented group B streptococcal disease in infants having usual associated bacteremia is Aqueous penicillin G 200 000 IU/kg/day IV, if sensitive.
ABSTRACT

Newborn: First Stool and Urine

**Time of First Void and First Stool in 500 Newborns.** Clark DA. Pediatrics. 1977;60:457-459

**Time of First Stool in Extremely Low Birthweight (≤1000 g) Infants.** Verma A, Dhanireddy R. J Pediatr. 1993;122:626-629


Passage of the first stool and urine in full-term neonates within the first 24 hours of life usually is a sign of well-being. After birth, 60% of healthy full-term neonates “stool” for the first time by 8 hours of life, 91% by 16 hours, 98.5% by 24 hours, and virtually all by 48 hours. Delay in the passage of the first stool in term neonates may be associated with lower intestinal obstruction, that is, meconium plug syndrome, Hirschsprung disease, and imperforate anus. More generalized problems such as sepsis or hypothyroidism should be considered and the maternal history should be reviewed carefully for an unanticipated complication of magnesium sulfate administration or narcotic use.

Physical examination and simple abdominal radiographs are the essential first steps in the evaluation of delayed passage of meconium. If anatomic abnormalities are suspected, consultation with a pediatric surgeon should be considered.

Gut motility is decreased in preterm infants. Several studies corroborate the findings of a delay in the passage of the first stool in these infants.

Nearly all neonates (full-term, preterm, and postterm) void by 24 hours; approximately 92% do so by 24 hours and 99% by 48 hours. It is recommended that any infant who has not voided by 24 hours be evaluated.

A wide variety of disorders may result in failure to void within the first day of life. It is important to consider prerenal, renal, or urinary tract etiologies for the anuria. The outcome of some of these disorders, especially those of prerenal origin, will be better when treated early. If no urine is seen by 24 hours, the maternal history should be reviewed carefully for oligohydraminos; asphyxia; familial renal disorder; drugs given to mothers, such as vasodilators (eg, beta agonists), pancuronium bromide, or phenobarbital; and risk factors for infections.

The physical examination should determine the state of hydration and the presence of congenital heart disease and hypotension (decreased renal perfusion) or hypertension (associated with renal disease). The finding of an abdominal mass or spine abnormalities suggest renal and bladder disorders.

An ultrasonogram that is noninvasive and reliable for detecting anatomic abnormalities should be performed early in the evaluation of these neonates. Urinary catherization will help determine if the bladder outlet is obstructed (with adequate urine production and excretion to the bladder—full bladder), if urine production is decreased, or if there is a higher obstruction to urine flow (empty bladder).

Laboratory evaluation may help determine the etiology of anuria. Serum and urine electrolyte levels, creatinine, osmolality, and urea nitrogen can help differentiate prerenal, renal, and postrenal causes. A fractional excretion of sodium (\(\text{FENa} = \frac{\text{U}_{\text{Na}}}{\text{U}_{\text{Cr}}} \times \frac{\text{P}_{\text{Cr}}}{\text{P}_{\text{Na}}} \times 100\)) of less than 1 suggests prerenal failure; a FENa of more than 3 supports the diagnosis of intrinsic renal disease. Urine osmolality that is twice that found in the serum, in association with decreased serum sodium concentration, suggests the syndrome of inappropriate antidiuretic hormone secretion, perhaps caused by asphyxia. Hematuria with red blood cell casts indicates renal parenchymal injury or disease.

If prerenal failure is suspected by clinical and laboratory evaluation, a fluid challenge with 20 cc/kg of intravenous normal saline over 1 to 2 hours followed by 1 to 2 mg/kg of intravenous furosemide is indicated. This should result in urine output if decreased renal perfusion secondary to maternal drug ingestion, asphyxia, dehydration, or hypotension is considered a prerenal etiology.

Intrinsic renal causes such as renal agenesis, hypoplasia, cystic kidney disease, or acquired acute tubular or...
and food intake will help determine nutritional status. Although wasting and obesity usually are obvious, each child’s height, weight, and head circumference should be plotted on growth charts. For those who deviate from their percentiles, measurements of skinfolds and laboratory determinations, including blood hemoglobin, red cell index, and serum proteins, may be necessary. Failure to thrive may have multiple secondary etiologies; the proximal cause, however, always is consumption of insufficient energy or insufficient essential nutrients.

**SUGGESTED READING**


**PIR QUIZ**

9. Breast-fed infants are most likely to require dietary supplementation with:
   A. Iron
   B. Vitamin A
   C. Vitamin C
   D. Vitamin D
   E. Zinc

10. Among the following, which is most likely to be associated with a vegetarian diet?
    A. Atherosclerotic heart disease.
    B. Cancer.
    C. Cholelithiasis.
    D. Growth failure.
    E. Obesity.

11. A true statement regarding iron supplementation is:
    A. Bottle-fed infants do not require iron supplementation until weaning occurs.
    B. Breast-fed infants should receive iron supplementation beginning at 6 months of age.
    C. Iron supplementation causes increased stool problems.
    D. Soy formulas contain supplemental iron.
    E. Unlimited consumption of whole cow milk avoids the need for iron supplementation.

12. Milk, when included in the diet of a nursing mother who is vegetarian, is most useful in protecting against deficiency of:
    A. Casein.
    B. Immune factors.
    C. Iron.
    D. Long-chain fatty acids.
    E. Vitamin B12.

13. Among the following, which best describes goat milk formulas?
    A. Adequately supplied with iron.
    B. Deficient in folic acid.
    C. Deficient in protein.
    D. Less allergenic than cow milk.
    E. Less costly than evaporated milk.

14. Among the following, the least effective measure to avoid obesity is to:
    A. Eat only when hungry.
    B. Exercise daily.
    C. Increase vitamin supplementation.
    D. Limit TV viewing.
    E. Snack on fruits.