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COVER

Each of our 1996 issues of Pediatrics in Review will feature a work of art submitted to our cover art contest this past year. We received more than 200 entries and have chosen 12 to appear on our covers—four from each of three age groups: 5 to 7 years, 8 to 10 years, and 11 to 15 years. The entrants were asked to submit a drawing of what they liked to do best. Most entries will be displayed by the American Academy of Pediatrics at various sites.

This month’s work, by 14-year-old Judith Kivinen, is of her “dressing up” when she was little. Judith lives in Brantford, Ontario, Canada; her pediatrician is Marijane Doyle, MD.

ANSWER KEY
   13. C; 14. C; 15. A
siderations regarding growth in sexual precocity are not unlike those confronting parents, patients, and physicians involved in caring for children of short stature. There is a tendency to assume “bigger is better,” and pediatric endocrinologists have great difficulty in bridling their enthusiasm for new forms of treatment. The behavioral aspects of early puberty are particularly ill-defined, with few data available.

The psychosocial development in patients who have variants of precocious puberty generally is consistent with chronologic age rather than with the degree of sexual maturation. Parents and physicians should be reminded continually of the young age of these children despite their appearance. Sexual behavior typically is not in advance of chronologic age, although sexual abuse may be increased in families in whom risk factors preexist. Ongoing, open, and free discussions about the behavioral aspects of sexual precocity are critical for successful management. Any physical change that makes a child appear different from peers puts that individual at some behavioral risk. How treatment may influence these risks remains unknown, although the sparse available data suggest that relatively few sequelae persist, even in the untreated state.

An exciting therapeutic advance in the medical treatment of gonadotropin-dependent sexual precocity is the use of the potent GnRH analogs to inhibit the release of LH and FSH. The advent of such therapy followed the finding that continuous (nonpulsatile) exposure of the pituitary gland to the hypothalamic tropin or high-frequency GnRH pulses stimulate gonadotropin release initially but had a refractory response subsequently. In practice, superagonist administration initially causes an increase in LH and FSH, but after a few days of treatment, gonadotropin secretion paradoxically decreases. Gonadal steroid secretion is abolished secondarily, and chemical castration endures for as long as treatment is continued.

Various GnRH agonists have been used in central precocious puberty. Their common feature is a substitution of the glycine residue at the sixth position of the native decapeptide. Different routes of administration have been used, with early studies employing daily subcutaneous injection. An aerosol spray to allow intranasal delivery of the agonist (three to four times daily) also has been used in an attempt to improve patient acceptance of therapy over the long term. However, the poor and variable degree of intranasal absorption of the agonist has been disappointing. A more attractive delivery system is the use of biodegradable microspheres that bind the drug and provide a slow-release depot formulation that can be administered as a monthly injection. The available data clearly indicate that agonist effect is dose-dependent and that the dosage required differs according to the specific drug used and its route of administration.

SUGGESTED READING
PIR QUIZ

6. You have just finished the scheduled examination of a healthy 1-year-old boy. While providing anticipatory guidance about her son’s expected sleep behavior in the next 2 months, you would most appropriately tell his mother to expect:
   A. Elimination of deep sleep.
   B. Elimination of morning naps.
   C. Increased night wakening.
   D. Increased total sleep time.
   E. Persistence of afternoon naps.

7. You are preparing a noon conference on sleep disorders of childhood for residents in your local training program. Which one of the following statements most appropriately reflects current knowledge?
   A. Bedtime struggles peak by the age of 2 years.
   B. Healthy toddlers rarely awaken at night.
   C. Individual variation in circadian rhythm pattern has little clinical relevance.
   D. Most children experience nightmares at some time during the preschool age.
   E. Preschool children are more likely to experience a night terror than a nightmare.

8. A mother is concerned that her 8-month-old daughter is awake most of the night and sleeps much of the day. A grandmother cares for the infant during the day while both parents work. The girl is developing normally and appears healthy on examination. Among the following management options, the best choice for the family is to:
   A. Administer chloral hydrate to the infant in her evening formula.
   B. Alternate responsibility for care of the infant during the night between the parents.
   C. Awaken the infant for regular daytime feedings.
   D. Have the mother give up her job.
   E. Have the parents seek night jobs so they can rest during the day.

9. A 3-year-old boy enjoys staying up and fights being put to bed each night. He usually gets out of bed once after being put down. His tantrums are emotionally draining to the parents. Among the following management options, the best choice for the family is to:
   A. Encourage him to sleep with the parents.
   B. Establish a consistent bedtime routine with minimal subsequent interaction.
   C. Have one parent stay with him to discuss possible fears and provide reassurance.
   D. Permit him to stay up until he is ready to fall asleep.
   E. Reset his circadian rhythm by administering chloral hydrate with an evening snack.

10. A mother reports that her previously well 4-year-old son has awakened abruptly from sleep twice in the past 2 weeks, screaming, shaking, and appearing intensely afraid. The episodes have lasted for 4 or 5 minutes each time. He has seemed unaware of her presence and she has been unable to comfort him during the attacks. However, in each case, he has quickly returned to sleep on his own and has recalled nothing the following morning. The physical examination is unremarkable. Which one of the following interventions would be most appropriate if subsequent episodes occur?
    A. Administer a 2-year trial of prophylactic imipramine.
    B. Advise the mother to allow each disturbance to run its course while protecting her son from injury.
    C. Advise the mother to awaken her son fully during an episode to gain insight into his fears and provide comfort.
    D. Advise the mother to discuss her observations and concerns with her son the next day in the hope of prompting full recall.
    E. Conduct a thorough flashlight search for monsters the following evening before bedtime in hopes of staving off a subsequent attack.
PIR QUIZ

11. Each of the following may be associated with hyperlipidemia except:
   A. Cushing syndrome.
   B. Diabetes mellitus.
   C. Glucose-6-phosphate dehydrogenase deficiency.
   D. Hypothyroidism.
   E. Nephrotic syndrome.

12. Hyperlipidemia may be associated with the use of each of the following drugs except:
   A. Ethanol.
   B. Calcium channel blockers.
   C. Oral contraceptives.
   D. Adrenal steroids.
   E. Isotretinoin.

13. Which of the following is not a risk factor associated with atherosclerosis?
   A. Cigarette smoking.
   B. Diabetes mellitus.
   C. Elevated HDL-cholesterol.
   D. Elevated LDL-cholesterol.
   E. Hypertension.

14. You have recommended dietary therapy for a child who has hypercholesterolemia. Fats in the diet should provide no more than:
   A. 10% of calories.
   B. 20% of calories.
   C. 30% of calories.
   D. 40% of calories.
   E. 50% of calories.

15. Your 12-year-old patient who has moderate hypercholesterolemia has failed an adequate trial of dietary intervention over a 12-month period. You have elected to initiate drug therapy. Your first choice would be:
   A. Bile acid sequestrant.
   B. Gemfibrozil.
   C. HMG CoA-reductase inhibitor.
   D. Nicotinic acid.
   E. Probufol.