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COVER

“Le Gourmet,” painted in 1901 by Picasso (1881–1973) during his “Blue Period,” demonstrates the natural appetite of the small child, who appears well nourished and even is eating standing up. Eating problems in children are not inherent in their stage of development but are their response to adverse environments. The blue color, however, suggests a threat to this healthy state. Child health professionals must balance this innate healthy aspect of childhood against the environmental threats to their well-being and be advocates for the healthy development of children. (This painting is from the National Gallery of Art’s Chester Dale collection and is reproduced with permission.)

ANSWER KEY

not hold true for children less than 7 years old. A contributing factor in this age group may be the higher incidence of child abuse, resulting in severe brain injury.

It is clear that even relatively intact survivors of severe head injury often may have minor physical and neurobehavioral deficits and learning disabilities that can require continued evaluation and therapy.

Children who have neurologic or psychiatric deficits following head injury require admission to a specialized rehabilitation program. Once the child is medically stable following the acute injury, the multidisciplinary approach offered by rehabilitation hospital personnel will optimize the child’s outcome. The multidisciplinary rehabilitation team includes physicians; nurses; physical, occupational, and speech therapists; psychologists; and school teachers working in concert with the patient and his or her family in an effort to provide rehabilitation in cognitive, motor, and behavioral areas. Once the child is ready to return home, many school districts offer special programs to assist in school reintegration.

SUGGESTED READING


Pascucci RJ. Head trauma in the child. Intensive Care Med. 1988;14:185–188


ABSTRACT

New DNA-based Test to Aid Diagnosis and Treatment of Lyme Arthritis


According to a recent press release from the National Institute of Arthritis and Musculoskeletal and Skin Diseases, researchers have made an important advance that should aid in both diagnosis and treatment of Lyme arthritis. They report that a new DNA-based test can detect, with high sensitivity and specificity, the presence of tiny amounts of genetic material from the Lyme bacterium in fluid from the swollen joints of patients who have arthritis due to Lyme disease. The new test applies the polymerase chain reaction technique, which was developed through Nobel prize-winning basic molecular biology research.

Joint fluid from 88 patients who had Lyme arthritis and 64 control patients having other forms of arthritis was tested. The researchers detected DNA from Lyme bacteria in joint fluid from 75 of the 88 Lyme arthritis patients (85%). Unlike currently used diagnostic tests for Lyme disease, there were no false-positive results; that is, none of the 64 control patients having other forms of arthritis tested positive.

R.J.H.
MANAGEMENT

Ichthyosis vulgaris can be treated effectively with various topical preparations; however, the clinical lesions will recur when therapy is discontinued.

Ichthyosis vulgaris may be managed by frequent use of emollients, such as petroleum jelly or less greasy creams. Emollients are very helpful, especially when applied immediately after bathing or showering. They help keep the skin moist and pliable and prevent cracking and fissuring.

Keratolytic agents such as salicylic acid are used to loosen scale. Urea and alpha-hydroxy acids improve binding of water to the epidermis. Salicylic acid, 10% to 20% urea-containing lotions or creams, and alpha-hydroxy acids such as lactic acid or glycolic acid are particularly useful if patients can tolerate them. Skin irritation, stinging, or burning can be side effects of these preparations, which should be used under the supervision of a physician.

Propylene glycol (40% to 60%) in water can be applied under occlusion with a plastic wrap; this is particularly useful for hydrating ichthyotic skin.

Use of these topical agents may be limited by coexisting inflammatory atopic dermatitis.

Summary

Atopic dermatitis remains a common skin problem in the pediatric age group. General approaches to management focus on reducing inflammation and pruritus as well as preventing xerosis. Ichthyosis vulgaris is the most common form of the ichthyoses and often is associated with atopic dermatitis. Recognition of these conditions is necessary to institute therapy that will alleviate the discomfort experienced by affected individuals.

ADDITIONAL INFORMATION

For information brochures, newsletters, or research support, contact the Eczema Association for Science and Education, 1221 SW Yamhill, Suite 303, Portland, Oregon 97205 (503) 228-4430, and The Foundation for Ichthyosys and Related Skin Types (F.I.R.S.T.), 3640 Grand Avenue, Suite 2, Oakland, California 94610.

SUGGESTED READING


PIR QUIZ

6. Over the past month, a 6-month-old infant has developed a gradually worsening dermatitis involving the face, trunk, and extremities. The infant was born at term, was exclusively breastfed for 4 months, and is now receiving a proprietary cow milk-based formula. Solid foods were introduced 1 month ago and are restricted to rice and strained peas. The infant receives a standard vitamin preparation daily. The mother had eczema until she was 5 years of age. Of the following, which is least important in the initial management of this infant?

A. Moisturizing the skin
B. Parental reassurance
C. Nonallergens for common allergens
D. Topical corticosteroid therapy
E. Trial of dietary manipulation

7. A 2-year-old child has had low-grade eczema for more than 1 year. This past fall, it became more prominent, especially on exposed surfaces of the arms and legs and on the face. The eruption is dry and has a thickened, lichenified texture; no oozing or crusting is apparent. Exposure to which of the following is most likely to have caused worsening of the eczema?

A. Eggs
B. House dust mites
C. Molds
D. Ragweed pollen
E. Viral infections

8. Kaposi varicelliform eruption is most likely to occur when atopic dermatitis is complicated by infection with:

A. Herpes simplex virus
B. *Staphylococcus aureus*
C. *Streptococcus pyogenes*
D. Varicella virus
E. *Venezuela*-zoster virus

9. The hypothesis that a relationship exists between atopic dermatitis and ichthyosis vulgaris is best supported by the observation that:

A. Many patients who have atopic dermatitis also have ichthyosis vulgaris
B. Many patients who have ichthyosis vulgaris also have atopic dermatitis
C. The inheritance pattern of the two conditions is the same
D. The two conditions have similar features on examination of skin biopsies
E. Treatment of one generally is effective for the other as well
ness is observed in 30% to 40% of children who have hypothyroidism, usually those whose disease is prolonged. Muscle bulk usually is normal or increased, but atrophy may occur. Marked muscular hypertrophy in hypothyroid children has been referred to as the Kocher-Debre-seme-laigine syndrome. The hypertrophy may involve the calves, thighs, hands, neck, tongue, and facial muscles.

Sexual development of most hypothyroid children is delayed. However, some of those whose disease is more severe and prolonged present having manifestations of sexual precocity. Females have precocious menarche and breast development in association with large ovarian follicles. Males show excessive enlargement of the testes and sometimes of the penis. Most patients lack sexual hair; galactorrhea may occur in patients of both sexes. With treatment, the manifestations of sexual precocity regress and normal puberty ensues at the appropriate time relative to maturity. Bone age is retarded, in keeping with the duration of the hypothyroid state.

The diagnosis is confirmed by measuring circulating T4 and TSH concentrations. In primary hypothyroidism, the T4 level is low or low-normal and the TSH concentration increased. Levels should be assessed relative to normal values for age. Patients who have hypothalamic-pituitary (secondary) hypothyroidism have low T4 and normal or low TSH values. Children who have thyroid resistance manifest increased concentrations of T4, with normal or increased levels of TSH. The serum T4 level should be determined in association with some measure of thyroid binding protein (T3 uptake test or equivalent) to exclude an abnormality of protein. Alternatively, a free T4 measurement can be obtained. This is very important when values are borderline.

**TREATMENT**

Children who have hypothyroidism are treated with thyroxine, as are infants. The dosage varies with age (Table 2) and should be adjusted to normalize serum T4 and TSH levels. Treated children resume growth at a rate greater than normal, the period of transient catch-up growth. The catch-up growth may be adequate to normalize the growth channel, although in children whose hypothyroidism is severe and prolonged, adult height may be reduced. Excessive thyroxine dosage is marked by disproportionate advancement in skeletal age. This should be avoided because it will hasten the closure of epiphyses and also may shorten adult stature. In children whose pituitary TSH deficiency is associated with deficiency of other anterior pituitary hormones, treatment should be provided as necessary. Patients whose compensated hypothyroidism is due to autoimmune thyroiditis is difficult to predict and is based on prolonged normalization of thyroid hormone titers, although there is no evidence that the natural progression of the disease is altered.

**SUGGESTED READING**


suppression appears necessary; complete graft tolerance never occurs or is so rare that discontinuing immunosuppression should not be attempted. Various medical complications may occur as a consequence of the immunosuppression, including infection, cyclosporine nephrotoxicity, and malignancy. The infectious (bacterial, viral, and fungal) complications occur most frequently within the first 3 months of transplantation. Malignancy after transplantation remains one of the long-term concerns, with a close association between the development of lymphoproliferative disease and lymphoma and infection with the Epstein-Barr virus.

Summary

It is imperative that serum bilirubin fractionation be performed in any infant whose jaundice is prolonged to identify the infant who has cholestasis. Conjugated hyperbilirubinemia always is pathologic, and a well-organized and expedient diagnostic evaluation should be undertaken to identify those conditions that are treatable medically or surgically if they are recognized early. The complications of prolonged cholestasis need to be recognized and the appropriate medical therapy instituted to allow patients to maximize their growth potential, avoid the problems of nutrient deficiencies, and maintain a reasonable quality of life. Hepatic transplantation now offers the opportunity for long-term survival for infants whose liver disorders previously were fatal.

SUGGESTED READING


Sokol RJ. Medical management of the infant or child with chronic liver disease. Semin Liver Dis. 1987;7:155–167