MASTER DE COMMUNICATION INTERNATIONALE EN SCIENCES DE LA SANTÉ

TEST DE PRÉSÉLÉCTION

1/Traduire le texte suivant en anglais

Une équipe de chercheurs vient d'identifier un nouveau gène impliqué dans l'autisme. Le rôle clé de ce gène dans l'organisation des connections neuronales apporte de nouvelles informations sur ce trouble du développement, atteignant les jeunes enfants, et dont l'origine demeure encore mystérieuse.

L'autisme est un syndrome complexe, classé parmi les troubles du développement, qui apparaît avant l'âge de 3 ans. Il est caractérisé par des déficits dans les interactions sociales et la communication, associés à un répertoire de comportements restreints, répétitifs et stéréotypés. Aujourd'hui, un enfant sur 200 serait atteint d'autisme, avec une fréquence quatre fois plus élevée chez les garçons. Depuis plusieurs années, de nombreuses recherches ont été menées pour identifier les gènes de susceptibilité à l'autisme. En 2003, une étude avait permis d'identifier, chez des personnes atteintes d'autisme ou du syndrome d'Asperger (forme moins sévère de l'autisme), des mutations altérant deux gènes situés sur le chromosome X (neuroligines *NLGN3* et *NLGN4*). Les neuroligines sont des protéines impliquées dans la formation des synapses (zones de communication entre les neurones). Cette équipe s'est depuis intéressée à une région particulière du chromosome 22, appelée 22q13. En effet, des altérations de cette région étaient responsables de retard mental, d'autisme et de trouble du langage, mais le gène en cause n'avait pas été identifié jusqu'à ce jour. L'équipe a identifié dans cette région 22q13 un gène, appelé SHANK3. Ce gène code une protéine connue pour interagir avec les neuroligines et qui joue un rôle crucial pour le développement des synapses.

2/Résumer le texte ci-dessous (cf. question 3) <u>en français</u>, maximum 200 mots

3/Traduire en français les passages soulignés

Adolescent Idiopathic Scoliosis: Review and Current Concepts

Recent research has led to a better understanding of the natural history of scoliosis. <u>However, the optimal strategy for screening, diagnosing and treating this common spinal deformity remains controversial. Of adolescents diagnosed with scoliosis, only 10 percent have curve progression requiring medical intervention. The ability to estimate which curves require therapy has led to more appropriate treatment with observation, bracing or surgery.</u>
Family physicians need to differentiate patients with stable or minimally progressive scoliosis who can be observed from patients with scoliosis that is at high risk for progression. They need to determine the patients they can follow and those who need referral to an orthopedic surgeon. <u>Unnecessary referrals of adolescents with minimal scoliosis who are at low risk for progression can cause marked anxiety and lost time from school and work, and lead to unnecessary radiation exposure</u>.
<u>Delayed referrals of patients with high-risk curves can lead to increased morbidity. In either situation, the psychologic and social effects of this disease can be profound.</u> This article describes an approach to diagnosing and treating scoliosis that allows physicians to lessen the

adverse psychologic, medical and economic effects of over-referral or delayed referral of adolescents to orthopedic subspecialists.

The Scoliosis Research Society has defined scoliosis as a lateral curvature of the spine greater than 10 degrees as measured using the Cobb method on a standing radiograph. Idiopathic scoliosis is a structural curve with no clear underlying cause. Secondary causes for scoliosis can usually be identified by radiography and clinical examination.
Idiopathic scoliosis is classified based on the age of the patient when it is first identified. Infantile scoliosis has an onset before three years of age. The infantile form accounts for fewer than 1 percent of all cases. Juvenile scoliosis is first detected between three and 10 years of age. The juvenile form occurs in 12 to 21 percent of all patients with idiopathic scoliosis. Adolescent idiopathic scoliosis is found between age 10 and skeletal maturity. The adolescent form accounts for the majority of cases of idiopathic scoliosis.

Scoliosis is present in 2 to 4 percent of children between 10 and 16years of age. The ratio of girls to boys with small curves of 10 degrees is equal but increases to a ratio of 10 girls for every one boy with curves greater than 30 degrees. Scoliosis in girls tends to progress more often and, therefore, girls more commonly need treatment than boys. The prevalence of curves greater than 30 degrees is approximately 0.2 percent, and the prevalence for curves greater than 40 degrees is approximately 0.1 percent. Improved understanding of the natural history and prognosis of this disease can help the physician predict the patients with scoliosis who need treatment.

Once a diagnosis of scoliosis has been made, the primary concerns are whether there is an underlying cause and if the curve will progress. The three main determinants of progression are patient gender, future growth potential and the curve magnitude at the time of diagnosis. In all cases, females have a risk of curve progression 10 times higher than males. The greater the growth potential and the larger the curve, the greater the likelihood of curve progression.