Emergency Treatment of Fractures in the Elderly

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Abstract: With advancing age, individuals experience a decline in reaction ability and lower limb strength, which, when combined with the presence of osteoporosis, increases the risk of fractures in daily life if proper attention is not given. The most prevalent site of fracture in the elderly population occurs between the femoral neck and trochanter, followed by lumbar vertebral compression fractures and ankle facet fractures. Osteoporosis and age-related decline in bone and joint regulatory capacity are the primary factors influencing fracture occurrence among older individuals. Implementing scientifically-based treatments can alleviate pain in the elderly population, thereby establishing a solid foundation for effective medical interventions.

Keywords: Elderly; Fracture; Solution

Introduction

In today's aging population of the society, the elderly gradually become the focus of social and family attention, their well-being affects the hearts of children. People to old age, reaction ability and lower limb strength are declining trend, coupled with osteoporosis, in daily life, a little attention, fracture may occur. If the family can make a correct judgment at the first time and do some scientific treatment, it will lay a good foundation for relieving the pain of the elderly and effective treatment by doctors. According to the foreign research report, the mortality rate of senile fracture, especially hip fracture, is as high as 40% , while the five-year survival rate is only 20% , around the world, 10% to 40% of elderly patients with fractures will die within 1 month after surgery, and about 30% of patients will die within 1 year after discharge[1]. Fractures that do not receive adequate treatment and care have an extremely high case fatality rate. Therefore, people should face up to the severity of fracture, once the elderly have a fracture, we should quickly seek medical treatment, Tian orthopedic doctors, through symptoms, medical history, examination, assisted by X-ray photography, to know the degree of displacement and Communication of the fracture, and to choose the appropriate treatment according to the fracture shape. It is also important to consult the geriatric orthopedic surgeon to diagnose the patient's condition in a timely manner and to take the necessary preventive and care measures (including post-fracture rehabilitation), in order to avoid the occurrence of complications, to give patients a balanced and comprehensive nutritional supplement, try our best to maintain the quality of life of patients.

Common types of fractures

The most common site of a fall in the elderly is between the neck and trochanter of the femur. These are the places where stress changes direction as the force travels from the lower limb down the femoral shaft to the pelvis. The hip on the injured side loses its ability to move autonomously and can not stand when the fracture occurs. At this time should not move the patient, it is important to maintain hip stability, reduce thigh activity. People with cardiovascular and cerebrovascular diseases should take necessary preventive and therapeutic drugs in time to avoid fracture pain inducing or aggravating hypertension, stroke, angina pectoris, myocardial infarction and shock. Lumbar vertebral compression fracture is also a common senile fracture, mainly occurred in the thoracic vertebral body 11,12, lumbar vertebral body 1,2[2]. The upward

transmission of force along the spine, in the vertebral body shape changes in the site of accumulation, coupled with osteoporosis in the elderly, resulting in fractures. Pain in the lower back and difficulty in standing after injury. At this point, must not twist the patient's body, otherwise it is very easy to damage the spinal cord, resulting in paraplegia, but should be lying on the ground, moving one side of the shoulder and hip in the same plane, the so-called“Axial roll over” of the elderly fracture of another good place is the distal radius, mainly occurs when the hand on the ground, fracture local deformity pain, finger movement disorders, at this point should be used cardboard, towel suspension to maintain the relative stability of the forearm and palm, and try to pad up the palm, avoid sagging, so as not to cause local swelling, affect the reduction.

The ankle joint surface fracture, should pay attention to keep the injured foot elevated, prevent the dropsy time long appears the swelling to cause the skin to break the influence fixed, the prompt cold compress is the pain-relieving method, is also the anti-swelling wonderful trick. In addition to the fracture, in principle to maintain the stability of both ends of the fracture, can maximize pain relief because the enemy of fracture is pain. People with other diseases should take relevant drugs in time to prevent pain from causing other adverse effects on the body. For the fracture of the elderly, in addition to doing the necessary family treatment, should be timely medical treatment.

Solutions

Simple fixation operation of limbs fracture

(1) fixation of forearm fracture: the injured limb was placed at elbow bending position and pressed against the function position of anterior chest. Wrap the upper limb with a splint (small wooden or cardboard, book, bamboo, etc.) from the elbow to the palm. And then with a triangle scarf hanging on the chest. (2) fixation of upper arm fracture: a padded splint from acromion to elbow tip was placed on the outer side of upper arm, and the upper arm was fixed to the chest with a spiral bandage. If can not find a fixed material, can also be upper arm with a belt or cloth belt with the chest together, and cut a wound side of the front flap, fold outward, buckle on the first or second button fixed. (3) collarbone fracture fixation: first put a large cotton pad under two armpits, then use the bottom edge of two triangle scarf, respectively in two armpits to the shoulder before the knot, and then in the back of the triangle scarf two top angle tension knot. (4) rib fracture fixation: may use the multi-head belt fixation (if does not have the multi-head belt, may tear the wide cloth both sides to be the width same cloth strip, does not tear in the middle) . First in the fracture pad on a large cotton pad or sponge pad, ask the injured to hold his breath, multi-head band in the healthy side of the chest knot fixation. (5) fixation of thigh fracture: use a splint from heel to armpit length, or use a long wooden board (bamboo, wooden sticks can also be several) on the outside of the injured limb, thigh socket (that is, after the knee) slightly pad clothes, with bandage or towel, cloth band will be affected limbs and splint together with a number of fastening. If do not have appropriate material, can also wrap two lower limbs together, contralateral fixed affected limb. (6) shank fracture fixation: use small plank 2 pieces, put in shank inside and outside side respectively, or only use a splint to put in shank, shank outside, from above knee joint to foot, Wrap and fix. (7) spinal fracture fixation: the injured person is lifted to a large plank (door plank, table plank, plank can be) , supine, the body and plank fixed together[3].

Spinal injury

Crista column injury is usually caused by direct or indirect sudden shock or compression. If the injury is limited to the spinal cord or nerve hemorrhage, edema, its movement, sensory disorders for temporary, the future may recover. After the fracture of the crest column, the spinal cord and nerve lose their protection and are oppressed by displaced vertebrae or bone fragments, which can cause different degrees of paralysis. If the spinal cord is transected, it can not return to normal. After the fracture of thoracic vertebra and lumbar vertebra, the damage of crest marrow causes the paralysis of both lower limbs, the patient can not take care of themselves, the fracture of cervical vertebra causes the damage of crest marrow, because of

the high position, can cause the paralysis of limbs, even affect the breathing, it is a serious threat to the patient's life. Suspected Crista injured, rescue, transport must be careful, as far as possible to maintain the crista post-injury position, do not let the back bending or rotation. The patient must not be carried on the back or hunched over carrying. The correct way to transport the patient is to insert the patient's shoulders and back, waist and buttocks, and the back of both lower limbs with both hands, and then three people hold the patient up at the same time to maintain the level of the Crista column, to the Pinto method or rolling method on the rigid board stretcher (or bed board and other substitutes) on the transport. Take care to keep it steady during transportation. When turning the patient over, rotate the upper and lower body at the same time to avoid"Twist twist"-like movements that may damage the cristae column[4].

There are two basic influencing factors of fracture in middle-aged and elderly people: Osteoporosis reduces bone strength. 2. As a result of aging, bone and joint flexibility reduction, coupled with not paying attention to physical activity, bone and joint adjustment ability decline, increased opportunities for falls. Therefore, the prevention of fracture, mainly from the above-mentioned aspects, mainly to the following points. First, to promote the significance of fracture prevention to the elderly, so that they fully understand the importance of fracture prevention in daily life to prevent the occurrence of fracture. Second, the law of life, adequate rest, keep energetic, keep the brain to the surrounding environment good responsiveness. Third, maintain good living habits. Do not smoke, do not drink, pay attention to supplement calcium in the diet, reduce bone absorption, thereby reducing the chance of fracture. Fourth, adhere to physical exercise, enhance physical fitness, maintain good brain regulation and joint flexibility. Fifth, pay attention to the activities under special environmental conditions. The fracture of middle-aged and old people is common in some special environment. Such as winter snow, ice, up and down the stairs, toilets, bathhouses and so on. Special attention should be paid to these special circumstances. Although a fracture is an accident, it can be unpredictable. But as long as in the daily life of full attention to this problem, can greatly reduce the chance of fracture.

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