The Role of Exercise and Physical Therapy in Managing Ankylosing Spondylitis

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Introduction

Ankylosing Spondylitis (AS) is a chronic inflammatory disease primarily affecting the spine and sacroiliac joints, leading to pain, stiffness, and potential loss of mobility. While pharmacological treatments, such as Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and biologics, are crucial for managing symptoms, non-pharmacological approaches, particularly exercise and physical therapy, play a pivotal role in the holistic management of AS. This article delves into the significance of exercise and physical therapy in managing ankylosing spondylitis, outlining their benefits, specific strategies, and how they can enhance patient quality of life.

Understanding ankylosing spondylitis

AS is characterized by inflammation in the spinal joints, which can result in the fusion of vertebrae over time, leading to a rigid spine. Patients often experience a range of symptoms, including:

Chronic pain: Pain in the lower back and hips is common, especially in the morning or after periods of inactivity.

Stiffness: Many individuals experience stiffness in the back and neck, which can limit mobility.

Postural changes: In advanced stages, the disease may lead to a stooped posture due to vertebral fusion.

Given these symptoms, effective management strategies are vital for maintaining mobility and enhancing quality of life.

Description

The importance of exercise

Exercise serves as a cornerstone in the management of ankylosing spondylitis for several reasons:

Improving flexibility and range of motion: Regular exercise can help maintain and improve the flexibility of the spine and joints. Stretching exercises, in particular, are beneficial in combating stiffness and promoting a greater range of motion, which is crucial for daily activities.

Reducing pain and inflammation: Physical activity stimulates the release of endorphins, the body's natural painkillers.

Exercise can also reduce the inflammatory markers in the body, helping to alleviate pain and discomfort associated with AS.

Enhancing postural alignment: Targeted exercises can strengthen the muscles that support the spine, improving posture and reducing the risk of spinal deformities. A strong back and core can help maintain an upright posture, which is essential in preventing complications associated with AS.

Promoting overall health: Regular physical activity contributes to overall physical health, reducing the risk of comorbidities such as obesity, cardiovascular disease, and diabetes. This is particularly important since individuals with AS may have an increased risk of these conditions.

Specific types of exercises

When considering exercise regimens for individuals with ankylosing spondylitis, it's important to focus on low-impact activities that promote flexibility, strength, and endurance. Here are some recommended types of exercises:

Stretching exercises

Stretching is essential for maintaining flexibility and preventing stiffness. Common stretches include:

Chest stretch: Standing or sitting, clasp your hands behind your back and gently lift your arms to open up the chest.

Hip flexor stretch: Kneeling on one knee, push the hips forward to stretch the hip flexors, which can become tight due to postural changes.

Strengthening exercises

Strengthening the core and back muscles helps support the spine and improve posture. Examples include:

Bridges: Lying on your back with knees bent, lift your hips off the ground while tightening your core.

Planks: Holding a plank position can strengthen the abdominal and back muscles, promoting better stability.

Aerobic exercises

Low-impact aerobic exercises, such as walking, swimming, and cycling, can enhance cardiovascular fitness without putting excessive strain on the joints. Aim for at least 150 minutes of moderate aerobic activity per week.

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Water therapy

Exercising in water can reduce the impact on joints while providing resistance. Activities such as water aerobics or swimming are excellent options for individuals with AS.

The role of physical therapy

Physical therapy plays a crucial role in managing ankylosing spondylitis, offering personalized approaches to exercise and rehabilitation. A physical therapist can design a tailored program that addresses individual needs and goals. Key aspects of physical therapy for AS include:

Assessment and evaluation: A physical therapist will assess the patient's physical condition, including posture, range of motion, and pain levels. This evaluation helps in creating an effective and personalized treatment plan.

Manual therapy: Techniques such as mobilization and manipulation can help alleviate pain and improve mobility. Manual therapy can also target specific areas of stiffness and discomfort, enhancing overall function.

Education and self-management strategies: Physical therapists provide education about the condition and empower patients with self-management strategies. Understanding the disease and learning how to manage symptoms effectively is crucial for long-term success.

Progress monitoring: Regular follow-ups with a physical therapist allow for ongoing assessment of progress. Adjustments to the exercise program can be made as needed, ensuring that the patient continues to improve.

Creating a sustainable exercise routine

Establishing a consistent exercise routine can be challenging, especially for those experiencing pain and fatigue. Here are some strategies to promote adherence:

Set realistic goals: Start with small, achievable goals to build confidence and motivation. Gradually increase the intensity and duration of exercises as comfort and strength improve.

Incorporate variety: Engaging in a variety of exercises can prevent boredom and maintain interest. Mixing stretching, strengthening, and aerobic activities can provide a well-rounded approach to fitness.

Listen to your body: It is essential to pay attention to how the body responds to exercise. If pain increases or new symptoms arise, modifications may be necessary. Rest and recovery are equally important.

Stay connected: Participating in group exercises or support groups can provide social interaction and motivation. Sharing experiences with others who have AS can foster a sense of community and support.

Conclusion

Exercise and physical therapy are integral components of managing ankylosing spondylitis. These non-pharmacological approaches not only alleviate symptoms but also enhance overall quality of life by improving mobility, reducing pain, and promoting psychological well-being. By incorporating a structured exercise regimen and working with a physical therapist, individuals with AS can take proactive steps toward managing their condition. Ultimately, a commitment to regular physical activity and rehabilitation can empower patients to live healthier, more active lives despite the challenges posed by ankylosing spondylitis.