Clinical Report

Patient Information

- **Name:** Ethan Sullivan
- **Date of Birth:** 07/30/2001
- **Age:** 24
- **Gender:** Male
- **Contact Information:** (555) 890-1234, esullivan@email.com
- **Address:** 890 West End Ave, Apt 4B, Anytown, USA

Referring Physician

- Dr. Amina Khan, MD
- Primary Care Physician
- City Health Medical Group

Medical Institution

- Anytown Center for Rheumatology and Spine Disease
- **Report Date:** 07/18/2025

Clinical History and Background

Ethan Sullivan is a 24-year-old paralegal who presents for evaluation of chronic low back pain. Mr. Sullivan was a collegiate rower and has always been physically active. His symptoms began insidiously approximately three years ago. He initially attributed the pain and stiffness to "overdoing it" at the gym or from his old rowing injuries. He has tried intermittent physical therapy and chiropractic care with only transient relief. Over the past year, the pain has become more constant, severe, and has developed features that prompted his PCP, Dr. Khan, to consider an inflammatory cause and refer him to our clinic. His family history is notable for a father who has "bad back problems" but no formal diagnosis. Mr. Sullivan is a non-smoker.

Current Symptoms & Patient-Reported Outcomes (PROs)

- **Inflammatory Low Back Pain:**
    - **Patient's Description:** "It's not a normal muscle ache. It's a deep, gnawing pain in my low back and buttocks. The worst part is the stiffness. I wake up in the morning feeling like I'm 90 years old. It takes me almost an hour of moving around and a hot shower before I can stand up straight."
    - **Severity:** Rates the morning stiffness as 9/10 and the average daily pain as 6/10.
    - **Duration:** Chronic, for over 3 years. He notes that the pain paradoxically improves with activity and exercise but is made worse by rest. He is often woken up by pain in the second half of the night.

    - **Clinical Note:** This is the classic description of inflammatory back pain, the hallmark symptom of Ankylosing Spondylitis (AS).
- **Alternating Buttock Pain:**
    - **Patient's Description:** "The pain isn't always in the middle of my back. Sometimes it's a deep ache in my right butt cheek for a few weeks, and then it will switch over to the left side."
    - **Severity:** Moderate, rated 5-6/10.
    - **Duration:** An intermittent feature over the past two years.
    - **Clinical Note:** This pattern is highly suggestive of sacroiliitis, inflammation of the sacroiliac joints.
- **Heel Pain (Enthesitis):**
    - **Patient's Description:** "Last year I had a terrible pain in my right heel for about two months. It was worst when I first got out of bed. The doctor at the walk-in clinic said it was plantar fasciitis."
    - **Severity:** Was severe at the time, but has since resolved.
    - **Duration:** Episode lasted 2 months.
    - **Clinical Note:** Enthesitis, or inflammation where tendons and ligaments attach to bone, is a key feature of AS. The heel is a common site.

- **Fatigue:**
    - **Patient's Description:** "I feel a constant sense of fatigue that isn't helped by sleep, which is frustrating because the back pain already messes with my sleep."
    - **Severity:** Moderate, but contributes to his overall decreased sense of well-being.
    - **Duration:** Worsening over the past year.
    - **Clinical Note:** A common systemic symptom driven by the chronic inflammatory process.

Clinical Findings

- **Vital Signs:**
    - **Blood Pressure:** 122/78 mmHg
    - **Heart Rate:** 72 bpm
    - **Respiratory Rate:** 16 breaths/min
    - **Temperature:** 98.6°F (37.0°C)
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- **Physical Examination:**
    - **Musculoskeletal:** There is marked tenderness to direct palpation over both sacroiliac joints. The modified Schober's test reveals a distraction of only 3 cm (normal >5 cm), indicating significantly reduced lumbar spine flexion. He has pain at the extremes of lateral flexion. FABER test is positive bilaterally, eliciting pain in the buttocks. Chest expansion is 4 cm (borderline reduced).
- **Laboratory Results:**

    - **Erythrocyte Sedimentation Rate (ESR):** 42 mm/hr (Normal 0-15 mm/hr) - *Elevated*.
    - **C-reactive Protein (CRP):** 3.9 mg/dL (Normal < 1.0 mg/dL) - *Elevated*.
    - **HLA-B27:** Positive.
    - **Rheumatoid Factor (RF) and anti-CCP:** Negative.
- **Imaging:**
    - **X-ray of Pelvis:** Shows sclerosis and subtle erosive changes of the bilateral sacroiliac joints, consistent with Grade 2 sacroiliitis.
    - **MRI of the Sacroiliac Joints with STIR sequence:** Reveals extensive bone marrow edema in the sacrum and ilium on both sides of the sacroiliac joints, confirming active, severe sacroiliitis.

Diagnosis

Mr. Sullivan's clinical presentation meets the Assessment of SpondyloArthritis international Society (ASAS) criteria for axial spondyloarthritis. With his history of chronic inflammatory back pain, positive HLA-B27, elevated inflammatory markers, and definitive evidence of active sacroiliitis on MRI, the diagnosis is confirmed as **Ankylosing Spondylitis**.

Treatment Strategy

The goals of treatment are to reduce pain and stiffness, maintain spinal flexibility and posture, prevent long-term joint damage, and improve overall quality of life.

1. **Cornerstone Therapy - Physical Therapy:**
    - This is the most critical component of management. He will receive an urgent referral to a physical therapist with expertise in AS. The program will focus on daily exercises for spinal mobility, stretching (especially of the hip flexors and hamstrings), core strengthening, and postural training. We have emphasized that this must become a lifelong habit.
2. **Pharmacological Treatment:**
    - **First-line:** We will start with a trial of a high-dose non-steroidal anti-inflammatory drug (NSAID), such as naproxen 500mg twice daily or celecoxib 200mg daily. He will be instructed to take this consistently, not just as needed, to achieve maximal anti-inflammatory effect.
    - **Second-line (if needed):** If Mr. Sullivan does not have a significant response to a 4-week trial of NSAIDs, he would be a candidate for biologic therapy. A TNF-alpha inhibitor (e.g., adalimumab, etanercept) would be the next step to control the underlying inflammation.

Summary and Plan

Mr. Ethan Sullivan is a 24-year-old male with a classic presentation of Ankylosing Spondylitis, now confirmed by clinical, serological, and imaging evidence. His years of pain have been validated, and the cause identified. The treatment plan is a partnership, relying heavily on his

commitment to a daily physical therapy regimen, which will be supported by anti-inflammatory medication. We will start with a trial of high-dose NSAIDs. The importance of early and effective treatment to prevent spinal fusion and maintain function has been thoroughly discussed.

Follow-up

He will follow up in our clinic in 4-6 weeks to assess his response to the NSAID trial and his engagement with physical therapy. At that time, we will objectively measure his disease activity (using a tool like the BASDAI) and determine if an escalation to biologic therapy is warranted. Regular follow-up every 3-6 months will be essential for long-term management.