

*I USED TO SAY IT WAS THE BEGINNING OF THE END,
BACK WHEN I WAS STILL IN THE BEGINNING.*

*THE END OF MY CHILDHOOD, I MEAN: EVERYTHING
CHANGED WHEN I WAS 12.*

S: Subjective

Chief Complaint (CC):

Patient presented with parents (who are separated). Mother reports noticing a hump on the right posterior torso while the patient was sitting on the floor in a bathing suit.

MY MOM'S NEW HOUSE HAD A POOL!

History of Present Illness (HPI):

The mother first observed the torso hump approximately one week ago. Patient has a lifelong history of body and pain issues, including intermittent foot pain and back pain. No recent trauma reported. Patient and family concerned about worsening posture and appearance.

Review Of Symptoms:

- Constitutional: No fever, chills, or weight changes.
- HEENT: negative
- Respiratory: Denies cough or SOB.
- Cardiovascular: No chest pain or palpitations.
- GI: Denies nausea, vomiting, diarrhea - food sensitivities - gluten, dairy
- GU: Negative.
- Musculoskeletal: Reports back pain and stiffness, especially after prolonged standing/moving. Spinal inspection reveals right thoracic convexity with ipsilateral rib hump on forward flexion. Denies joint swelling or weakness in limbs. No recent trauma. No difficulty walking, but pain in feet at the end of the day.
- Neuro: Alert. No dizziness or paresthesias.
- Psych: Patient does not verbalize specific mood concerns and denies feeling sad, anxious, or overwhelmed, though reports recent fatigue and difficulty concentrating. Parent notes recent social withdrawal and changes in sleep. Affect in clinic is calm and subdued. Heart rate elevated; no acute distress observed. Symptoms may reflect underlying mood or anxiety concerns; further evaluation warranted.
- Endocrine/Heme/Immuno: Negative.

Past medical history (PMH): diagnosed with extra bone in right and left foot, wore a boot at age 10

*I DIDN'T KNOW WHAT WAS WRONG. BUT I HAD ALWAYS BEEN UNHAPPY, ANGRY, OVERWHELMED,
BURNT OUT... BUT NOONE KNEW HOW TO HELP. I WAS JUST AN ANGRY, OBSTINATE CHILD WHO WAS IN
QUITE A BIT OF PAIN.*

*MY PARENTS ANNOUNCED THEIR IMPENDING
DIVORCE ON THEIR BED. I WAS NEITHER HAPPY
NOR SAD, OR I TOLD MYSELF NOT TO BE, OR I
DIDN'T KNOW I WAS. I DID NOT CRY, LIKE MY
SISTER AND MY DAD AND MY MOM.*

*SOME PART OF ME WAS EXCITED TO GO
TO THE HOSPITAL, SOMETHING WAS
WRONG! I'D ALWAYS WANTED TO BE IN A
WHEELCHAIR. I WANTED TO HAVE
SURGERY. I WAS FASCINATED BY ANATOMY
AND BODIES.*

*I KNEW THE WORDS "ANXIETY", "DEPRESSION",
"AUTISM", BUT THEY WEREN'T MINE YET.*

- Surgical history: N/A
- Family history: unknown/non-existent, it is unknown whether there is a family history of scoliosis
- Social history: 12-year-old, parents divorced, shared custody, 6th grader. No reports of bullying, has always been withdrawn
- Medications: N/A
- Allergies: gluten, dairy, that one antibiotic

AT THE TIME, WE DIDN'T KNOW. NOW, WE KNOW MY MOM HAS MODERATE LUMBAR SCOLIOSIS, MY MATERNAL GRANDMOTHER HAD MODERATE SCOLIOSIS AND MY COUSIN HAS MILD SCOLIOSIS.

I HAVE A FEW DISTINCT MEMORIES OF BEING BULLIED, BEFORE THE "BEGINNING OF THE END". BUT I DIDN'T KNOW WHAT IT WAS CALLED. I JUST KNEW THAT I WANTED TO BE ALONE MOST OF THE TIME, ALL THE TIME.

O: Objective

Vital Signs:

- Temperature: 98.4°F
- Heart Rate: 104 bpm (elevated, possibly anxiety-related)
- Blood Pressure: 108/68 mmHg
- Respiratory Rate: 18 breaths/min
- Oxygen Saturation: 99% on room air

WELL-NOURISHED. I'M SURE I LOOKED VERY WELL NOURISHED - I WAS A FAT KID. I THINK IT'S BECAUSE I REFUSED TO EXERCISE, BECAUSE OF MY FEET. THEY STARTED HURTING WHEN I WAS AROUND 6, AND THEY HURT EVERYDAY. I DON'T THINK THE GROWN-UPS BELIEVED ME. I WAS JUST A LAZY KID WHO WANTED TO GET OUT OF DOING THINGS. IT'S OKAY, NOW, AS I LOOK BACK AT IT, I UNDERSTAND. BUT THEN I FELT LIKE THIS WAS ALL ANYONE COULD DO ABOUT ANYTHING.

Physical Exam:

General:

- Well-nourished, well-developed 12-year-old, quiet and cooperative, no acute distress observed despite tachycardia.

HEENT:

- Normocephalic, atraumatic. Pupils equal, round, reactive to light. Oropharynx clear.

Cardiac:

- Regular rate and rhythm, no murmurs or gallops.

Respiratory:

- Clear to auscultation bilaterally, no wheezes or crackles.

EVEN NOW, MY RESTING HEARTBEAT IS USUALLY JUST ABOUT 100, AND I AM OFTEN OVERWHELMED AND ANXIOUS

Abdominal:

- Soft, non-tender, no organomegaly.

Musculoskeletal:

- Severe scoliosis with three curves identified.
 - Right thoracic curve, Cobb angle $\sim 75^\circ$ (severe)
 - Left lumbar curve, Cobb angle $\sim 53^\circ$ (severe)
 - Right cervical curve, Cobb angle $\sim 30^\circ$ (moderate)
- Visible rib hump noted on forward bending (Adam's test) on right thoracic region.
- Asymmetry of shoulders and waistline observed.
- Full range of motion of all joints. No joint swelling or tenderness.
- Normal gait, no limb length discrepancy.

Neurological:

- Alert and oriented $\times 3$.
- Cranial nerves intact.
- Motor strength 5/5 in all extremities.
- Sensory examination normal.
- Reflexes symmetrical and normal.
- No signs of myelopathy or radiculopathy.

Psychiatric:

Calm, cooperative.
Affect subdued,
eye contact appropriate.
Speech soft but coherent.
No psychomotor agitation or retardation.

Diagnostic Test Results:

Spinal X-rays (PA and lateral views).

THE PEDIATRIC ORTHOPEDIC SURGEON HAD US
TAKE AN X-RAY RIGHT AWAY. I CAN'T REMEMBER
WHAT I FELT WHEN I FIRST SAW IT.
INTELLECTUALLY, I KNEW IT WAS MY BACK, I
COULD TELL MYSELF IT WAS. BUT MY BACK FELT,
FROM THE INSIDE, NORMAL.

GOD, I DIDN'T KNOW IT WAS CALLED "ADAM'S TEST".
HAH! WHAT AN IDEA. A TEST NAMED AFTER THE MIS-
TRANSLATION OF A CREATION MYTH. AND WHAT DOES IT
EVEN MEAN? MY RIBS ARE BURSTING FORTH TO MAKE A
NEW EVE?

AY, THERE'S THE RUB

THE MATTER OF MY LIFE, RIGHT THERE.

AND I WANTED IT. I WAS ALMOST
EXCITED TO HAVE A MEDICAL CONDITION
FOR WHICH I NEEDED MEDICAL
ATTENTION.

I KNEW NOTHING OF WHAT LAY AHEAD, WE NEVER DO, BUT IT
WAS AS IF I DIDN'T UNDERSTAND WHAT WAS HAPPENING - AND
MAYBE I DIDN'T. MAYBE I WAS IN SHOCK AFTER EVERYTHING
ELSE THAT YEAR... MAYBE I WASN'T FULLY GRASPING WHAT MY
LIFE WAS NOW, WHAT THE MATTER OF MY EVERYDAY WOULD BE -

*I CAN'T IMAGINE WHAT MY PARENTS THOUGHT
WHEN THEY SAW THAT IMAGE.*

- Confirmed three-curve scoliosis pattern with Cobb angles as above (Right thoracic 75°, Left lumbar 50°, Right cervical 30°).

Evidence of vertebral rotation consistent with rib hump deformity.

No evidence of vertebral fractures or congenital anomalies.

EKG: Normal sinus rhythm, no arrhythmias.

Lab tests: N/A

A PROBLEM TO BE SOLVED.

HOW DOES SHE STAND UPRIGHT?

CAN THIS BE CURED?

A HOPELESS CASE

COULD MY DAUGHTER DIE FROM THIS?

A GUT PUNCH

MY DAUGHTER IS DEFORMED

NO WONDER SHE HAS SO MUCH PAIN...

MY DAUGHTER IS A HUNCHBACK

WHY MY DAUGHTER?

GIVE THAT CURVE TO ME.

A: Assessment

Diagnosis: Severe idiopathic scoliosis with three distinct curves:

- Cervical curve: 30° (moderate)
- Thoracic curve: 75° (severe)
- Lumbar curve: 50° (severe)

Interpretation: Cobb angle measurements from spinal radiographs confirm significant multi-curve scoliosis with marked vertebral rotation and rib hump deformity consistent with severe disease.

Severity: The degree and number of curves indicate a severe, complex scoliosis requiring orthopedic evaluation for surgical intervention

P: Plan

SURGERY?!

*WHAT DOES THAT MEAN? WE'RE DEALING WITH THE SPINAL COLUMN
HERE - THE CENTRAL FUCKING NERVOUS SYSTEM!!!*

Tests to order: No additional imaging or labs needed at this time. Current radiographs sufficient for surgical planning.

Medications prescribed: None.

Therapies/Procedures:

Surgery highly recommended — posterior spinal fusion with placement

of titanium rods to stabilize and correct spinal curvature.

Family discussion held: father consents to surgery; mother expresses hesitation and is conducting independent research. Counseling offered to address concerns.

*IDIOPATHIC SCOLIOSIS: SCOLIOSIS THAT
DEVELOPS WITHOUT A KNOWN CAUSE.*

THE ORTHOPEDIC SURGEON TOLD US 11 – ELEVEN – VERTEBRAE NEEDED TO BE FUSED TOGETHER INTO A MOSTLY STRAIGHT UNMOVABLE COLUMN. I WOULD NOT BE ABLE TO BEND AT THE WAIST, TO STRETCH, FOR THE REST OF MY LIFE. NOT TO MENTION THE TITANIUM CHILL DOWN MY FROZEN SPINE.

THE SURGEON TOLD US HE WAS THE BEST AT THIS SURGERY.

Patient Education:

HE TOLD US THAT, IF UNTREATED, MY LEFT LUNG WOULD COLLAPSE. APPARENTLY, BACK IN THE 2000S, SURGEONS WOULD TELL FAMILIES THAT THEIR CHILD'S CONCAVE RIBS WOULD COLLAPSE THEIR KID'S LUNGS. WHILE THE RIB ROTATION DOES EFFECT THE LUNGS, A LUNG WILL NOT POP, IT WOULD BE SQUEEZED SO TIGHTLY THAT THEIR KIDS WOULDN'T BE ABLE TO BREATHE INTO THAT LUNG, OR ONLY A LIMITED AMOUNT OF AIR COULD GET IN.

Explained scoliosis pathophysiology, natural progression, and risks of untreated severe curves, including worsening deformity, chronic pain, and pulmonary compromise.

Discussed surgical goals, risks, benefits, and recovery expectations.

Follow-up Instructions:

HE TOLD US THAT IF WE WERE WORRIED ABOUT HOW MY NUNCHBACK LOOKED, HE COULD SCRAPE SOME OF THE RIB BONE OFF THE CONVEX SIDE OF MY RIBS AND ATTACH IT TO MY PELVIS... TO COSMETICALLY "MASK" THE HUMP.

Schedule preoperative evaluation and surgical planning appointments.

Encourage open family discussion and provide resources/support for mother's concerns.

Safety Netting:

MY 12 YEAR OLD BRAIN REASONED, "BUT IF WHAT WORRIES YOU IS THAT MY LUNG COULD COLLAPSE BECAUSE MY RIBS ARE ROTATING, THEN ANY SURGERY THAT DOESN'T CORRECT THE RIB ROTATION WON'T TAKE AWAY THE RISK."

Emphasized importance of timely intervention to prevent progression.

Instructed family to seek urgent care for sudden worsening symptoms such as increased shortness of breath, chest pain, or neurological changes (numbness, weakness).

WHEN WE LEFT THE HOSPITAL, I WAS QUIETLY EXCITED ABOUT THE FACT OF HAVING A MEDICAL DIAGNOSIS – I MIGHT GET SURGERY AND RIDE IN A WHEELCHAIR.

MY PARENTS WERE NOT HAPPY. WHEN WE GOT OUTSIDE THE AUTOMATIC DOORS OF THE HOSPITAL, I TURNED AROUND TO SEE WHY THEY HAD STOPPED. MY MOM HAD COLLAPSED INTO MY DAD'S ARMS, SOBBING. THEY WERE GETTING A DIVORCE, AND I HADN'T EXPECTED THEM TO HUG EVER AGAIN.

I TURNED AWAY, I DON'T THINK I COULD PROCESS WHATEVER WAS HAPPENING.

SUBJECTIVE

CHIEF COMPLAINT: DAILY DISCOMFORT, PAIN

HISTORY OF ILLNESS: DIAGNOSED 2005. DID NOT GET SURGERY. TREATED WITH THE SCHROTH METHOD, CHIROPRACTIC CARE AND BRACING THROUGHOUT ADOLESCENCE AND ADULTHOOD.

PAST MEDICAL HISTORY: MINE

REVIEW OF SYMPTOMS: I LIVE A FULL LIFE. I HAVE A JOB, I HAVE A DOG, I'M DOING WELL.

OBJECTIVE

HEART RATE: 104 BPM (ELEVATED, DEFINITELY OVERWHELM AND ANXIETY-RELATED)

PHYSICAL EXAM:

GENERAL:

- HEALTHY ADULT WOMAN.

MUSCULOSKELETAL:

- A BIT OF A HUNCHBACK – I'VE GOT THAT ARCHIBALD CRAVEN VIBE, AND HAPPY TO REPRESENT. PERHAPS A WITCH OR TWO? POSSIBLY A BELL-TOWER IN MY FUTURE?
- ASIDE FROM THE HUNCHBACK (WHICH ISN'T NOTICEABLE UNLESS YOU'RE LOOKING FOR IT OR I HAVE A TIGHT SHIRT ON), MY BODY LOOKS NORMAL – I WALK EVENLY, ALTHOUGH ONE OF MY LEGS IS SHORTER THAN THE OTHER.

PSYCHIATRIC:

DIAGNOSED WITH BIPOLAR DISORDER II 2016

HISTORY OF ANXIETY, DEPRESSION

AUTISTIC

DIAGNOSTIC TEST RESULTS:

SPINAL X-RAYS (PA AND LATERAL VIEWS):

– YES, AN X-RAY WILL CONFIRM THAT I HAVE A SEVERE S-CURVE SCOLIOSIS. I'M JUST LIVING MY LIFE.

ASSESSMENT

DIAGNOSIS: SEVERE IDIOPATHIC SCOLIOSIS. THE DOCTORS COULDN'T GIVE US A REASON – ONLY "IDIOPATHIC" (LIKE THEIR PATHOLOGY IS IDIOTIC) – BUT IT'S GENETIC. PEOPLE STILL DON'T KNOW WHY SCOLIOSIS HAPPENS, EVEN THE GENETIC KIND, BUT THERE ARE THEORIES THAT SCOLIOSIS COULD BE A VIRUS THAT FUNCTIONS LIKE POLIO. WHICH COULD MAKE A LOT OF SENSE.

INTERPRETATION: I HAVE SCOLIOSIS, AND IT AFFECTS MY ENTIRE SKELETON.

SEVERITY: YES, MY SCOLIOSIS IS SEVERE, BUT YOU WOULDN'T KNOW TO LOOK AT ME! THANKS TO MY MOM, WHO GAVE ME THE TOOLS TO WORK WITH IT.

PLAN

TESTS TO ORDER: NONE OF THAT.

MEDICATIONS PRESCRIBED: NONE FOR SCOLIOSIS

THERAPIES/PROCEDURES:

- SURGERY HIGHLY RECOMMENDED — BUT REFUSED.
- IT TOOK ME SOME TIME TO TRUST MY DAD WITH INFORMATION ABOUT MY BACK AFTER HE SO STOLIDLY STOOD FOR THE SURGERY THAT MIGHT HAVE KILLED ME, OR LEFT ME PARALYZED. OF COURSE, HE JUST WANTED THE BEST FOR ME, HE WANTED ME TO SURVIVE, AND HE TRUSTED THE MEDICAL INDUSTRY TO TELL THE TRUTH.

PATIENT EDUCATION:

- MY MOM DID SO MUCH RESEARCH FOR ME — FOUND THE BRACES I WORE, WHAT EXERCISES TO DO, BROUGHT ME TO ALL SORTS OF BODY PRACTITIONERS, INCLUDING WEEKLY MAINTENANCE VISITS AT THE CHIROPRACTOR.
- THE MEDICAL DOCTORS DIDN'T KNOW WHO THEY WERE DEALING WITH.
- I EDUCATE MYSELF NOW, AND JUST KNOW THINGS, TOO, ABOUT MY OWN BODY AND HOW IT WORKS. I AM AN EXPERT AT SCOLIOSIS AND HOW TO MANAGE IT.
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FOLLOW-UP INSTRUCTIONS:

- WHEN I GOT MY BRACE, I OPENED UP IN SCHOOL, I BECAME MORE SOCIAL THAN I HAD EVER BEEN BEFORE, I MADE FRIENDS, AND FOR A FEW YEARS, I FELT FANTASTIC.
- I WORE A PLASTIC BACK BRACE 23 HOURS A DAY FOR MORE THAN HALF MY LIFE. I STILL WEAR IT TO SLEEP AND TO WALK, BUT THERE WAS A TIME IN MY MID-TWENTIES WHEN I WEANED MYSELF OFF OF IT. I'LL NEED IT FOR THE REST OF MY LIFE. AND THAT'S OKAY WITH ME.

SAFETY NETTING:

- WE DID NOT PREVENT PROGRESSION. BUT MY LUNG HAS NOT BEEN COMPRESSED ENOUGH FOR ME TO NOTICE.
- I STAND STRAIGHT. PEOPLE ARE SURPRISED WHEN I TELL THEM I HAVE SCOLIOSIS, LET ALONE SEVERE SCOLIOSIS. THIS IS BECAUSE I WORE — AND WEAR A BRACE REGULARLY. IT HELPED MY MUSCLES GROW IN A WAY THAT KEEPS THE VISIBLE EFFECTS OF THE ROTATION LOW.
- SOMETIMES I FEEL MY RIBS RUBBING TOGETHER. IT DOESN'T HURT.

THE BEGINNING.