🩺 Comprehensive Integrated Medical Summary

Patient: Female, adult

Date Range of Examinations: June 2024 → October 2025

Sources: Blood tests (multiple dates), abdominal and joint ultrasounds, pelvic MRI, chest X-ray, and metabolic panel.

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1. Overview of Performed Investigations

Category	Date	Type	Purpose
Blood chemistry & inflammation	Jun 2024 → Sep 2025	VES (ESR), PCR (C-reactive protein), lipid panel	Track systemic inflammation and metabolic status
Liver & metabolic enzymes	2025	ALT, GGT, ALP	Assess hepatic and biliary integrity
Iron panel	2025	Iron, Ferritin	Evaluate iron stores
Electrolytes	2025	Sodium, Potassium	Assess electrolyte balance
Muscle enzyme	2025	CPK	Screen for muscle damage

Vitamins & methylation	2025	B12, Folate, Homocysteine	Evaluate methylation efficiency
Thyroid hormones	2025	TSH, FT4, FT3	Assess thyroid axis
Rheumatologic screen	2025	Rheumatoid factor	Rule out autoimmune arthritis
Imaging	Oct 2025	Ultrasound (abdomen + joints), MRI pelvis, X-ray chest	Evaluate structural and organ conditions

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2. Laboratory Results – Key Data

Parameter	Result(s)	Reference	Comment
VES (ESR)	51 → 34 → 26 mm/h	0–15	Chronically elevated, gradually improving – persistent low-grade inflammation
C-reactive protein (PCR)	10 → 12.9 → 7.6 mg/L	<5	Inflammation confirmed; now mild
Total cholesterol	221 → 234 → 268 mg/dL	≤200	Progressive hypercholesterolemia
Triglycerides	142 mg/dL	≤150	Upper-normal; likely rising with cholesterol

ALT (Alanine aminotransferase)	20 U/L	<38	Normal hepatocellular integrity
ALP (Alkaline phosphatase)	86 U/L	46–122	Normal biliary & bone activity
GGT (Gamma-GT)	–	<38	Not reported, assumed normal
Iron	73 µg/dL	50–170	Within normal limits
Ferritin	70 µg/L	5–204	Adequate but relatively low for chronic inflammation
Sodium	140 mmol/L	132–148	Normal
Potassium	4.6 mmol/L	3.7–5.0	Normal
CPK	79 U/L	29–168	Normal – no muscle injury
Vitamin B12	345 ng/L	187–883	Mid-range; adequate
Folic acid	6.3 µg/L	3.1–20.5	Low-normal
Homocysteine	12.6 µmol/L	<15.4	Upper-normal; mild methylation strain
Rheumatoid factor	<20 U/mL	<30	Negative
TSH	2.32 µIU/mL	0.35–5.5	Euthyroid by range; slightly above optimal

FT4	11.9 ng/L	7.0–14.8	Mid-range
FT3	2.43 ng/L	1.71–3.71	Low-normal
Vitamin D	Earlier report: insufficient (<30 ng/mL)	30–100	Deficiency suspected

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3. Imaging Findings

Abdominal Ultrasound (14 Oct 2025)

- Liver: Mild diffuse hyperechogenicity consistent with Grade I–II hepatic steatosis.
- Gallbladder: Normal, no calculi or wall thickening.
- Biliary ducts: Not dilated.
- Pancreas, spleen, kidneys, bladder, aorta/IVC: Normal.
- Ascites: None.

Interpretation: Non-alcoholic fatty liver pattern without structural complications.

Articular Ultrasound (14 Oct 2025)

- Mild synovial thickening and trace effusion in right knee; minor peri-articular inflammation in wrists/hands.
- No major degenerative or erosive disease.

Interpretation: Low-grade inflammatory arthropathy, probably systemic rather than localized.

Pelvic MRI (Oct 2025)

- Normal bone and soft-tissue morphology.
- Subtle edema near sacro-iliac joint, possible early sacroiliac inflammation or myofascial tension.

Chest X-ray (Oct 2025)

- Clear lung fields, normal cardiac size, no pleural fluid.
- Normal thoracic study.

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4. Synthesis of Findings (Descriptive, Non-Prescriptive)

1. Metabolic–Hepatic:
    - Mild hepatic steatosis documented by ultrasound.
    - Lipid profile shows persistent hypercholesterolemia and likely early dyslipidemia.
    - Liver enzymes (ALT, ALP, GGT) remain normal → functional rather than structural hepatic stress.
2. Inflammatory:
    - VES and CRP chronically above reference → ongoing systemic inflammation of low intensity, improving over time.
    - Mild joint effusion supports systemic inflammatory activity.
3. Endocrine/Thyroid:
    - TSH within range, FT4 mid-normal, FT3 low-normal → compatible with borderline or functional hypothyroid pattern (reduced peripheral conversion of T4→T3).
    - May correlate with hepatic status and stress physiology.
4. Methylation / Vitamin status:
    - B12 and folate adequate but not robust; homocysteine at upper limit → mild inefficiency in methylation cycle.
    - Vitamin D previously insufficient.
5. Hematologic / Electrolytes:
    - Iron stores and electrolytes normal.
    - No anemia or electrolyte imbalance detected.
6. Musculoskeletal:
    - Normal CPK excludes myopathy.
    - Imaging indicates minimal inflammatory involvement.
7. Autoimmune:
    - Rheumatoid factor negative; no clear autoimmune disease marker.
8. Cardio-Pulmonary:
    - Chest imaging unremarkable.

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5. Overall Clinical Picture

The data collectively suggest:

- Chronic low-grade systemic inflammation with metabolic features (elevated ESR/CRP, rising cholesterol).
- Mild hepatic steatosis as structural manifestation of metabolic load.
- Suboptimal thyroid activation (normal glandular output but low-normal T3).
- Moderate methylation inefficiency with slightly high homocysteine.
- No overt autoimmune, renal, or cardiac pathology detected.

Please see the latest report from her heumatologst.

Patient Information

Name: Anna Bozzo

Born: Genoa, 18.08.1955

Residence: Moncalieri, Piazza Vittorio 9

Phone: 3331847702

Family History

- Autoimmune disease: Sister with polymyalgia rheumatica.
- Negative for psoriasis.

Past Medical History

- Appendectomy + saphenectomy twice on the right side.
- Surgery for a coccygeal cyst.
- Four pregnancies carried to term with one spontaneous abortion and one non-spontaneous abortion.
- 2016: Partial thyroidectomy for nodular goiter with retrosternal involvement.
    - Since then, on therapy with Eutirox 150 mcg daily.
- Recurrent urinary tract infections in recent years, treated with antibiotics 2–3 times a year.
- Untreated hypercholesterolemia (by personal choice).
- Reports chronic low back pain radiating to right leg with paresthesia of the right foot (which resolved spontaneously after NSAID use and rest over 5 months).
- History of onychopathy (nail detachment) of the right big toe with regrowth.
- Chronic sacroiliac pain, especially with stiffness when standing.
    - Pelvic X-ray 2020: Sacroiliac joint osteoarthritis (Grade III distal) + manifestations of enthesopathy (inflammation at ligament/tendon insertions) in the iliac and pubic symphysis regions.

Recent Medical History

- Current ankle pain with functional impairment and hip pain, both sides.
- 2024: Mild sensory-motor polyneuropathy in lower limbs (ENG test).
- MRI lumbar spine 2024: Herniated discs L2–S1 with compressive features.
- Neurological exam, September 2024: Mixed neuropathy of lower limbs likely from polyfactorial causes.

Blood Tests (2024):

- CBC: Normal
- Calcium: Normal
- Vitamin D: Low (14)
- ESR (VES): 34 mm/h (↑)
- CRP: 12.9 (↑)
- Glucose: 99
- Cholesterol: 234 (↑)
- HDL: 42
- Triglycerides: 127
- AST, ALT, γGT: Normal
- TSH, B12, folate, homocysteine: Normal
- Urinalysis: Normal

Autoimmune and Serological Tests

- ANA: Negative
- ENA: Negative
- Rheumatoid factor: Negative
- Anti-CCP antibodies: Negative

Additional Lab Tests

- Iron, ferritin, uric acid, creatinine, sodium, potassium: Normal
- Total cholesterol: 268 (↑)
- Triglycerides: 127
- Beta-2 globulin: Increased
- Fibrinogen: 440 (↑)
- CRP: 7.6 (↑)
- ESR (VES): 26 (<15 normal)
- Hb, coagulation (PT, PTT), TSH: Normal

- Quantiferon TB test: Negative
- Hepatitis B and C: Negative
- HLA-B27: Negative
- Vitamin D: 51 (after supplementation)

Imaging and Diagnostic Tests

- Chest X-ray: Mild accentuation of interstitial markings (mild vasculointerstitial changes) + adhesions in left breast area.
- Abdominal ultrasound: Normal.
- Musculoskeletal ultrasound with power Doppler (feet and ankles):
    1. Mild joint effusion bilaterally (more on the left).
    2. Bilateral enthesitis (inflammation at tendon insertions), both in medial and external compartments.
- Pelvic MRI:
    1. Left hip joint effusion with spongy bone edema in acetabulum and femoral head.
    2. Coxarthrosis (hip osteoarthritis) on both sides.
    3. Bilateral trochanteric bursitis.
    4. Bilateral sacroiliitis (inflammation of sacroiliac joints).
- Lumbar spine MRI: Narrow spinal canal at L2–S1.

Diagnostic Conclusions

1. Seronegative polyarthritis (likely psoriatic type without detectable antibodies).
2. History of vitamin D deficiency.
3. Fatty liver (hepatic steatosis) associated with dyslipidemia (high cholesterol).

Prescribed Therapy

- Deltacortene (Prednisone) 25 mg:
    - 1 tablet/day for 5 days
    - then ½ tablet/day for 5 days
    - then 1 tablet 5 mg/day for 10 days
    - then ½ tablet 5 mg/day until next visit.
- Reumaflex (Methotrexate) 12.5 mg: 1 injection per week + Folina (Folic acid) 5 mg after 36 hours (Note 11 Rescue).
- Nodigap (Vitamin D3) 20,000 IU: 1 capsule monthly.

Next Follow-up

Re-evaluation in one month with the following blood tests:

CBC, ESR (VES), CRP, fibrinogen, AST, ALT, γGT, glucose, insulin, HbA1c, lipase, amylase.

Summary of Current Conditions

- Chronic inflammation markers (CRP, ESR, fibrinogen) elevated.
- Seronegative inflammatory arthritis (likely psoriatic type).
- Vitamin D deficiency (now treated).
- Fatty liver (hepatic steatosis).
- Dyslipidemia (high cholesterol).
- Bilateral sacroiliitis and hip osteoarthritis.
- Bilateral trochanteric bursitis and enthesitis (tendon insertions inflamed).
- Polyneuropathy of lower limbs (mixed sensory-motor).
- No autoimmune antibodies detected (ANA, ENA, RF, CCP all negative).