

# UNTREATED HYPOTHYROIDISM CAN LEAD TO SERIOUS CONSEQUENCES IN ALL ORGAN SYSTEMS

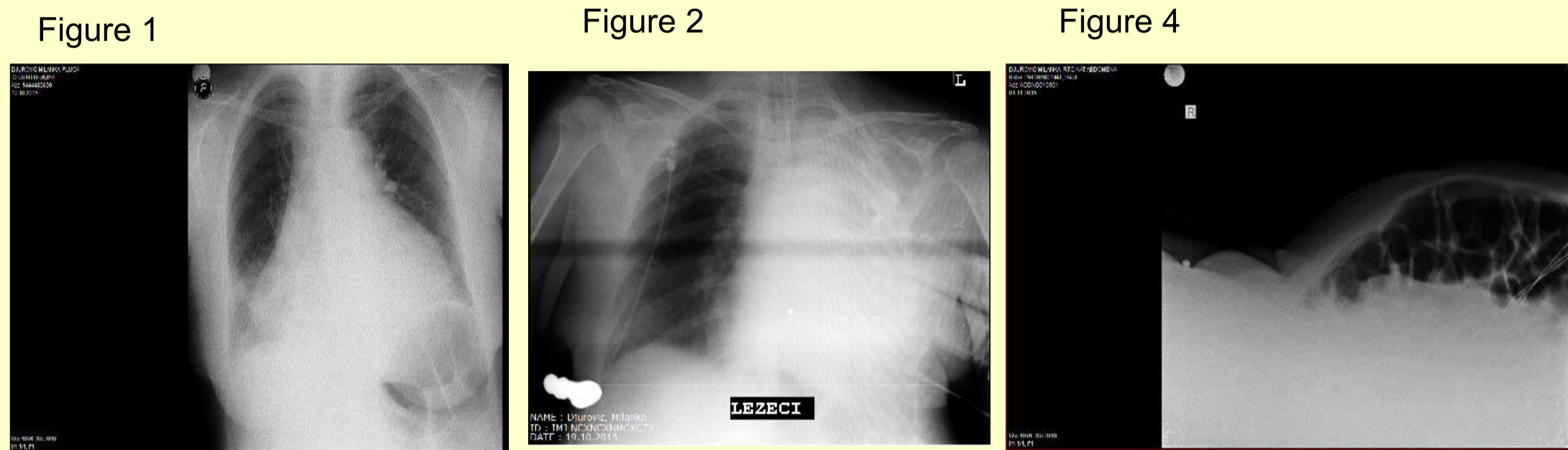
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## OBJECTIVES

To present a patient with all manifestations of long-term unsubstituted hypothyroidism- from alopecia to myxedema and megacolon

Biohemijske analize				Metabolizam lipida			
Parametar	Vrijednost	Jedinice	RV	Parametar	Vrijednost	Jedinice	RV
S-Glukoza	5.5	mmol/L	4.6 - 6.4	S-Holesterol	H: 5.92	mmol/L	
S-Urea	3.7	mmol/L	3.5 - 7.2	S-Trigliceridi	L: 1.28	mmol/L	
S-Kreatinin	61	μmol/L	44 - 80	S-HDL-holesterol	L: 1.65	mmol/L	
R-GFR	86	mL/min/1.73m <sup>2</sup>	> 60	R-LDL-holesterol (računski)	H: 3.69	mmol/L	
S-Mokraćna kiselina	152	μmol/L	150 - 350	<b>Hemostazne analize</b>			
S-Ukupni proteini	H: 87	g/L	64 - 83	Parametar	Vrijednost	Jedinice	RV
S-Albumin	L: 48	g/L	34 - 48	P-Protrombinsko vrijeme	12.5	s	11 - 14
A/G	1.23		1.17 - 1.74	P-INR	1.0		Th. opseg vj. valj. 2.5-3.5 ostali 2.0-3.0
S-Bilirubin totalni	11.8	μmol/L	3 - 20	P-aPTT	H: 43.5	s	26 - 37
S-Bilirubin direktni	4.6	μmol/L	< 5	P-Trombinsko vrijeme	H: 20.2	s	14 - 21
S-CRP	H: 104.6	mg/L	< 5	P-Fibrinogen	H: 5.1	g/L	1.8 - 4
S-AST	H: 57	U/L	< 31	P-D-dimer	H: 0.89	μg/L FEU	< 0.5
S-ALT	19	U/L	< 33	<b>Hormoni i metaboliti</b>			
S-Alkalna fosfataza	126	U/L	< 141	Parametar	Vrijednost	Jedinice	RV
S-GGT	32	U/L	< 40	TSH	H: 34.53	mIU/L	0.40 - 4.00
S-LDH	H: 531	U/L	< 223	<b>Acido bazna ravnoteža</b>			
S-Kreatin kinaza	H: 1142	U/L	< 170	Parametar	Vrijednost	Jedinice	RV
S-Kalcijum	2.29	mmol/L	2.10 - 2.55	pH	7.37		7.35 - 7.45
S-Magnezijum	0.72	mmol/L	0.66 - 0.99	pCO <sub>2</sub>	H: 6.31	kPa	4.3 - 5.7
S-Kalijum	L: 3.06	mmol/L	3.5 - 5.1	pO <sub>2</sub>	L: 5.77	kPa	9.5 - 13.9
S-Natrijum	L: 120	mmol/L	136 - 145	BE	L: 1.5	mmol/L	od -2 do +3
S-Hloridi	L: 78.9	mmol/L	97 - 108	BB	H: 49.5	mmol/L	43 - 49
<b>Biohemijske analize</b>				HCO <sub>3</sub>	27.3	mmol/L	21 - 28
Parametar	Vrijednost	Jedinice	RV	TCO <sub>2</sub>	28.7	mmol/L	22 - 29
S-Glukoz	H: 11.4	mmol/L	4.6 - 6.4	so <sub>2</sub>	L: 78.0	%	94 - 98
S-Urea	H: 148	μmol/L	44 - 80	<b>Hormoni i metaboliti</b>			
R-GFR	L: 31	mL/min/1.73m <sup>2</sup>	> 60	Parametar	Vrijednost	Jedinice	RV
S-Ukupni proteini	L: 61	g/L	64 - 83	Kortizol	450	nmol/L	138 - 690
S-Albumin	L: 35	g/L	34 - 48				
S-CRP	H: 57.3	mg/L	< 5.0				
S-AST	H: 167	U/L	< 31				
S-ALT	H: 412	U/L	< 33				
S-Kalcijum	L: 2.09	mmol/L	2.10 - 2.55				
S-Kalijum	L: 3.10	mmol/L	3.5 - 5.1				
S-Natrijum	L: 130	mmol/L	136 - 145				



## METHODS

Case:

- Sixty-one-old year women was admitted in ICU due to disturbance of consciousness, respiratory failure and electrolyte imbalance
- Sopor, expressed alopecia, dry, flaky, pail skin, generalized edema, lung stasis and pericardial friction (fig.1, 3)
- A laboratory parameters pointed to the presence of normocytic normochromic anemia, hyponatremia, acidosis and hypoxia, and hormonal analyzes expressed in primary hypothyroidism
- In the immunological findings of elevated double-spiral DNA



## RESULTS

- To present a patient with all manifestations of long-term unsubstituted hypothyroidism- from alopecia to myxedema megacolon
- Visualization techniques proved the presence of pleural effusion and atelectasis of the left lung parenchyma ( fig.2), the presence of pericardial effusion (fig.1, 3), a small amount of fluid in the abdomen, as well as expressed enlarged and filled with air both flexure and transverse section of the colon (Fig.4, 5), and multiishaemical changes in white matter of the brain
- The patient was intubated, applied mechanical ventilation. We started substitution with levothyroxine, diuretics, corticosteroids and other symptomatic therapy. She was treated with enema various times, repeatedly performed bronchoscopy treatment on 4 occasions, and tracheotomy was made
- The treatment led to an improvement in the sense of lowering the parameters of inflammation, improving the acid-base parameters and reexpansion of the lung parenchyma, and general condition of the patient was getting better

## CONCLUSIONS

- The lack of treatment of hypothyroidism can lead to serious consequences in all organ systems
- Since the autoimmune process has never antigen completely sensitive, there is a possibility of affection more target tissues in autoimmune process and mutually overlapping signs and symptoms of various autoimmune diseases
- Elevated levels of double-spiral DNA in combination with the presence of and criteria indicate the presence of lupus disease

## References

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