



DELAYED DIAGNOSIS OF POLYMYOSITIS

Antonija Krstacić^{1,2,3}, Leo Pažanin⁴, Goran Krstacić^{2,3,5}, Silva Butković Soldo^{2,3}

© 2023 by Acta Medica Saliniana
ISSN 0350-364X

DOI: 10.5457/652

Antonija Krstacić,
Leo Pažanin,
Goran Krstacić,
Silva Butković Soldo

Affiliations:

¹Sestre milosrdnice“University Hospital Center, Clinical Hospital of traumatology, Zagreb, Croatia,

²Faculty of Dental Medicine and Health, Josip Juraj Strossmayer University of Osijek, Croatia,

³The Faculty of Medicine, Josip Juraj Strossmayer University of Osijek, Croatia,

⁴ „Sestre milosrdnice“University Hospital Center, Clinical Department of Pathology and Cytology “Ljudevit Jurak” , Zagreb, Croatia,

⁵Institute for cardiovascular Disease and rehabilitation Zagreb, Croatia

INTRODUCTION

A 58-year-old man was first admitted to our department , with a approximately one-year history of slowly progressive weakness of the legs, characterised by difficulty in climbing or descending stairs, and in getting up of a squat. There was no history of fever, muscle or joint pain, dysphagia, or skin rash. His general health had been good. On neurological examination the cranial nerves were normal the upper limbs were normal. His gait was normal but he was unable to getting up of a squat. He had atrophy of the right quadriceps muscle. He was able to sit up from a supine position without difficulty. In the lower limbs there was marked wasting and weakness of both quadriceps muscles and atrophy of right gastrocnemius muscle. The other lower limb muscles were normal in both bulk and strength. The limb reflexes were depressed and the plantar responses were flexor. Sensation was normal to all modalities. The following laboratory tests were normal; full blood count, haemoglobin, erythrocyte sedimentation rate (ESR), serology, serum electrolytes and blood urea, serum calcium, phosphorous and alkaline phosphatase blood glucose, liver and renal function tests, thyroxine hormone T₄, an auto-antibody screen was negative and the following investigations were normal like chest radiograph and electrocardiogram (ECG). His blood pressure was 120/80 mm/Hg. Hyperlipoproteinemia has been previously verified; cholesterol - CHOL was 7,2 mmol/L and low density

cholesterol- LDL was 5,2 mmol/L and significant creatine kinase (CK) elevation is observed on prescribed statins. So, statins were excluded, but CK remained elevated. (766U/L – 455U/L). He used red rice and diet for fats. Control cholesterol (CHOL) was 6,5 mmol/L and LDL was 4,3 mmol/L. The serum CK was 766 U/L (normal 10-43) and myoglobin (MYOG) was 454 µg/L. Electromyographic sampling of the left vastus medialis and right gastrocnemius muscles showed fibrillation potentials at rest. There was an excess of short duration polyphasic motor unit action potentials of low amplitude indicating a primary muscle disease. Other causes of muscular lesions or weakness were ruled out. Biopsy of the left vastus medialis muscle showed collections of inflammatory cells, which were mainly interstitial but sometimes perivascular (photo 1 and 2). The patient was treated with prednisone 60 mg every day, and after two months his serum CK had fallen to 226 IU/L. CK dropped gradually in the following months from 402 to 332 and to 226 U/L, and Myog had fallen from 417 µg / L to 211 µg/L, but elevated glucose levels were noted GUK 18.9 mmol / L. The dose of prednisone was reduced. Following reduction of the steroids his leg weakness became more marked. The CK serum had risen on 342, so methotrexatum was recommenced with considerable improvement in the lower limb weakness. Prednisone finally stopped gradually in a following month. When we last seen, he was taking methotrexatum 12.5mg once a week with folacin 5mg, The serum CK fell to 194 IU/L and his condition was static.

Received:

25.05.2022.

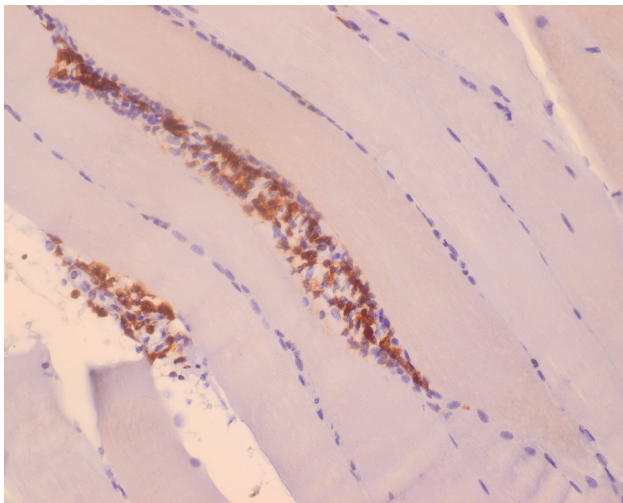
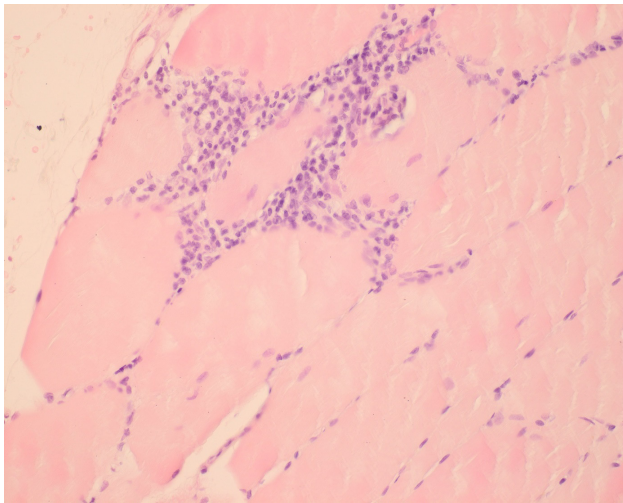
Accepted:

Corresponding author:

Antonija Krstacic
e-mail: akrstacic@gmail.com

Funding: none

Competing interests: none



Polymyositis is a connective tissue disease of unknown etiology. Polymyositis is a rare autoimmune condition that affects adults and is one of the many idiopathic inflammatory myopathies. It is defined as a subacute myopathy, which takes more than 4 months to manifest. Patients commonly present with weakness at the proximal muscles. Muscle inflammation and weakness are the key features of idiopathic inflammatory myopathies. Diagnosis of polymyositis is based on a combination of clinical, laboratory and electromyography findings and finally by muscle biopsy. Muscle biopsy is the definitive diagnostic test.

Polymyositis should certainly be considered in the differential diagnosis of symptoms presented by muscle weakness although it is a rare condition.

In summary, we report the importance of considering a polymyositis in adult in the differential diagnosis in patient with signs of slowly progressive weakness. Delay in the diagnosis of this rare disease may be due to the poorly progressive clinical picture, which is accompanied by moderately elevated CK parameters.

REFERENCES

1. Cox S, Limaye V, Hill C, Blumbergs P, Roberts-Thomson P. Idiopathic inflammatory myopathies: diagnostic criteria, classification and epidemiological features. *Int J Rheum Dis.* 2010 May;13(2):117-24.
2. Schmidt J. Current Classification and Management of Inflammatory Myopathies. *J Neuromuscul Dis.* 2018;5(2):109-129. doi: 10.3233/JND-180308.
3. Raychaudhuri SP, Mitra A. Polymyositis and dermatomyositis: Disease spectrum and classification. *Indian J Dermatol.* 2012 Sep;57(5):366-70.
4. Dalakas MC, Hohlfeld R. Polymyositis and dermatomyositis. *Lancet.* 2003;362:971-982.



Scan this QR code with your mobile device for instant access to the current Issue of Acta Medica Saliniana

Dear readers,

There were several errors printed in Acta Medica Saliniana 2022, Volume 52, Issue 1-2 in the paperwork entitled "Knowledge, Attitude and Practice towards Sexually Transmitted Diseases among Medical and Non-medical Female Students of Academy of Professional Studies Šabac, Serbia" authors Maida Mulić, Marijana Srečković, Dušan Backović, and Nadina Nuhbegović.

Namely, a typing error was made in the last name of the co-author Marijana Srečković (Srečković is in the text, and the co-author's last name is Srečković). Also, there is a shift of the first rows of the tables under ordinal numbers 2, 3, 4 and 5. E.g. "health students" and "non-health students" should cover two fields in the tables, and statistical processing should cover the last (table 2) or the last two fields (tables 3, 4 and 5).

We apologize to the author and co-authors of the paper and publish the correct tables below.

Table 1: Sociodemographic characteristics of the respondents in Academy of Professional Studies Šabac

Variable	n (medical students / non-medical students)	% (medical students / non-medical students)
Age of the respondent		
18-24	97 / 247	80.8 / 90.1
25-34	13 / 18	10.8 / 6.6
>34	10 / 9	8.3 / 3.3
Currently married		
Yes	20 / 44	16.7 / 16.1
No	100 / 230	83.3 / 83.9
Year of study		
First	42 / 86	35 / 31.4
Second	40 / 99	33.3 / 36.1
Third	38 / 89	31.7 / 32.5
Residence before joining university		
Urban	56 / 134	46.7 / 48.9
Rural	64 / 140	53.3 / 51.1
Religion		
Orthodox	118 / 273	98.3 / 99.6
Catholic	2 / 1	1.7 / 0.4

Table 2. Sources of knowledge and information on sexually transmitted diseases

Source of Information	Medical students		Non-medical students		Total
	N	Yes (%)	N	Yes (%)	N
Gynecologist	17	14.2	70	25.5	87
Medical personnel	5	4.2	4	1.5	9
Pharmacist	0	0.0	3	1.1	3
primary and/or secondary school education	62	51.7	69	25.2	131
Tertiary school education	5	4.2	27	9.9	32
Television	2	1.7	21	7.7	23
Internet	13	10.8	37	13.5	50
Magazines, newspapers	2	1.7	7	2.6	9
Parents	7	5.8	21	7.7	28
Friends	7	5.8	13	4.7	20
Brother and sister	0	0.0	2	0.7	2
Total	120	100.0	274	100.0	394

Table 3. Knowledge of terminology on sexually transmitted diseases

Disease	Medical students		Non-medical students		OR (CI)	Chi-square test χ^2
	N	Yes (%)	N	Yes (%)		
HIV/AIDS	117	97.5	249	90.9	0.25 (0.08-0.86)	5.547
Syphilis	109	90.8	172	62.8	0.17 (0.07-0.33)	32.12
Gonorrhoea	106	88.3	163	59.5	0.19 (0.11-0.36)	32.05
Condyloma (genital warts)	106	88.3	186	67.9	0.28 (0.15-0.52)	18.19
Genital herpes	98	81.7	143	52.2	0.25 (0.15-0.41)	30.53
Chlamydia	89	74.2	116	42.3	0.26 (0.16-0.41)	33.88
Hepatitis B	76	63.3	104	38.0	0.35 (0.23-0.55)	21.66
Hepatitis C	84	70.0	105	38.5	0.27 (0.17-0.42)	32.21
Trichomoniasis	60	50.0	69	25.2	0.34 (0.22-0.53)	23.34

OR = Odds Ratio; CI = 95% confidence interval

Table 4. Knowledge of the routes of transmission of sexually transmitted diseases

STDs transmission	Medical students		Non-medical students		OR (CI)	Chi-square test
	N	Yes (%)	N	Yes (%)		χ^2
Unprotected sexual intercourse	119	99.2	253	93.3	0.10 (0.01-0.76)	7.39
Non-sexual ways (blood or blood products)	109	90.8	168	61.3	0.16 (0.08-0.31)	34.83
Transmitted from mother to child	103	85.8	146	53.5	0.19 (0.11-0.33)	38.01
Cuddle	10	8.3	17	6.2	0.73 (0.32-1.64)	0.59
Dinner set	16	13.3	20	7.3	0.51 (0.26-1.03)	3.62
Bath towel	42	35.0	79	28.8	0.75 (0.48-1.19)	1.49
Toilet seat	29	24.2	69	25.2	1.06 (0.64-1.74)	0.05

OR = Odds Ratio; CI = 95% confidence interval

Table 5. Knowledge about the consequences of sexually transmitted infections

Consequences of STDs	Medical students		Non-medical students		OR (CI)	Chi-square test
	N	Yes (%)	N	Yes (%)		χ^2
Infertility	96	80.0	165	50.2	0.38 (0.23-0.63)	16.60
Sterility	101	84.2	189	69.0	0.42 (0.24-0.73)	9.91
Preterm delivery	79	65.8	57	20.8	0.14 (0.09-0.22)	74.87
Ectopic pregnancy	60	50.0	57	20.8	0.26 (0.17-0.42)	34.08
Stillbirth	66	55.0	53	19.3	0.20 (0.12-0.31)	50.33
Carcinoma cervicis uteri	87	72.5	128	46.7	0.33 (0.21-0.53)	22.38

OR = Odds Ratio; CI = 95% confidence interval