

„Polymyositida“ u pacientů s myasthenia gravis a thymomem

—

autoimunitní zánět nebo paraneoplázie?

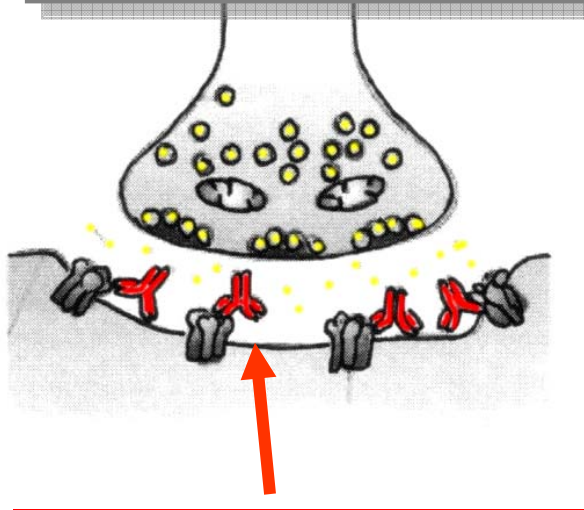
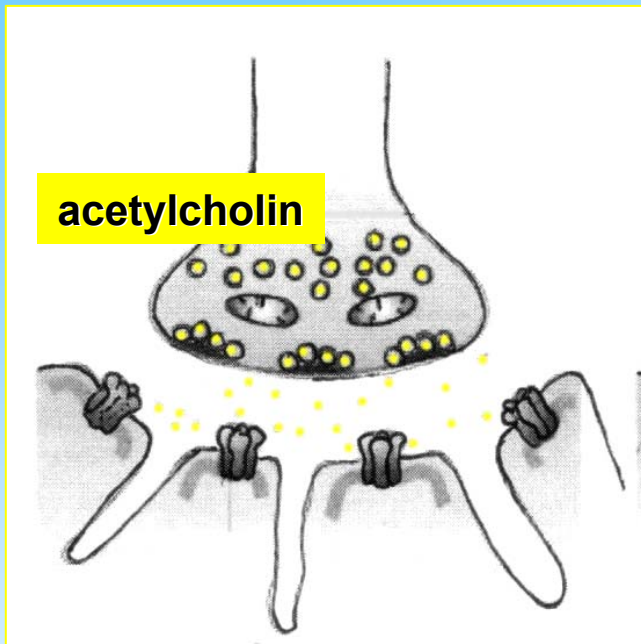
J. Zámečník,

B. Jakubička, D. Veselý, V. Šimková, J. Piřha, J. Schützner

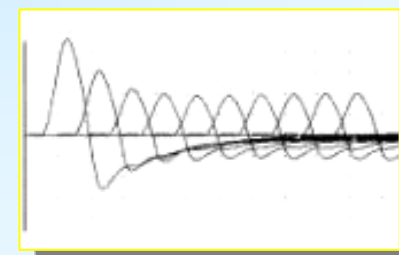
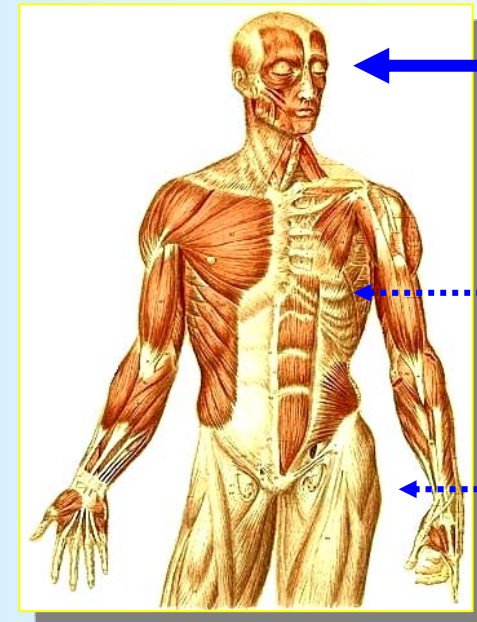
Ústav patologie a molekulární medicíny
UK 2. LF a FN Motol, Praha

Nervosvalová ploténka

MYASTHENIA GRAVIS

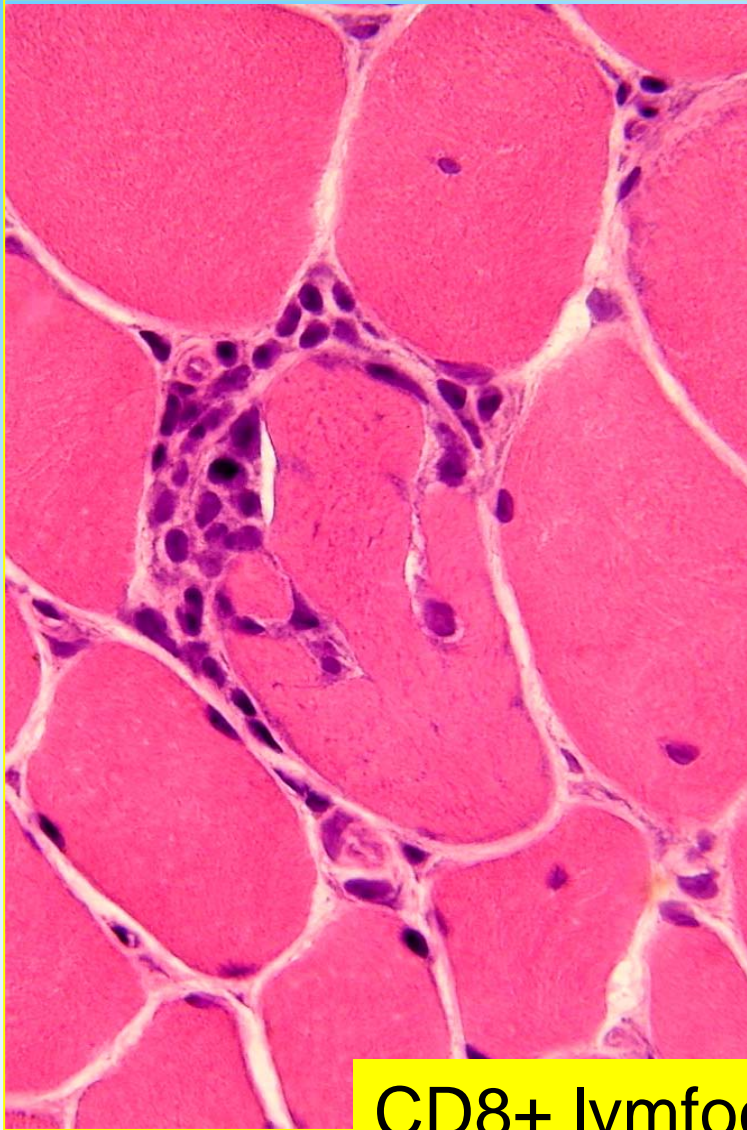


autoprotiátky proti acetylcholinovému receptoru

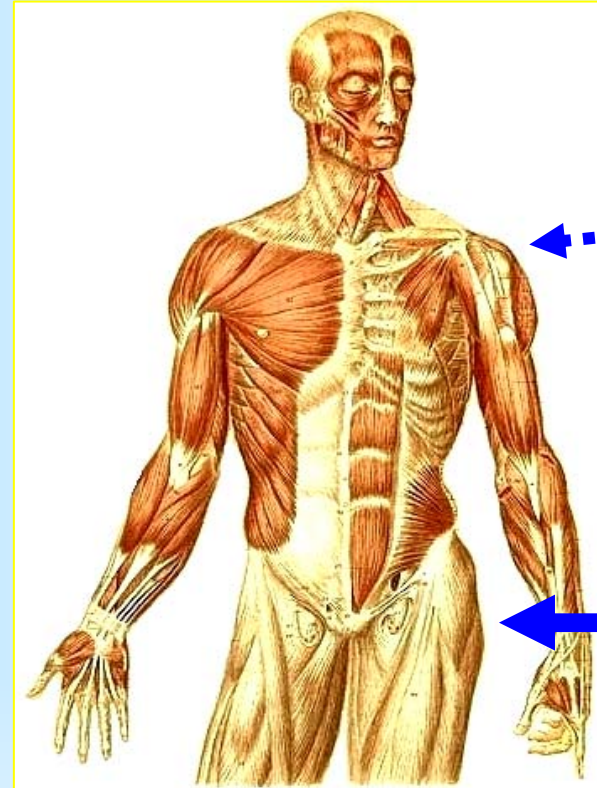


EMG

POLYMYOSITIS



CD8+ lymfocyty



CK

EMG

Diferenciální diagnostika hraničních případů

POLYMYOSITIS

x

**MYASTHENIA
GRAVIS**



CD8+ lymfocyty



Diferenciální diagnostika hraničních případů

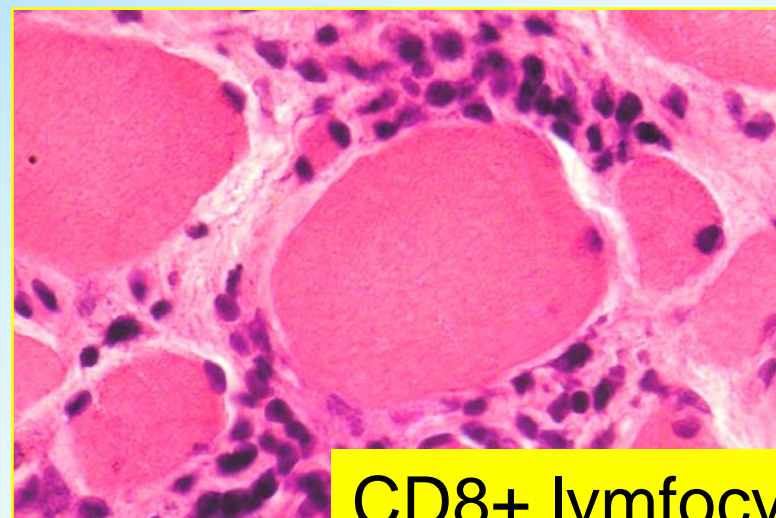
POLYMYOSITIS

x

**MYASTHENIA
GRAVIS**

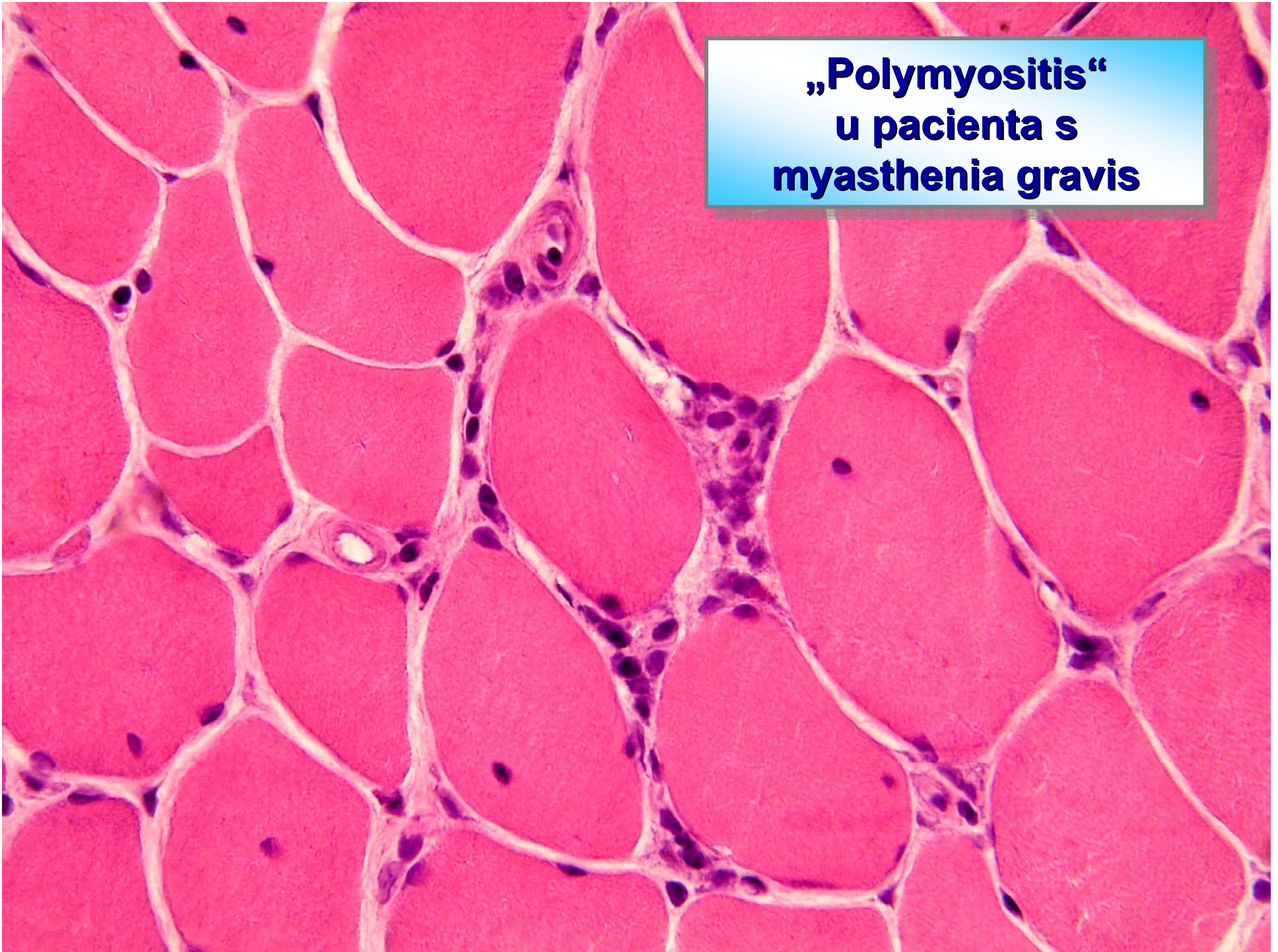


CD8+ lymfocyty



CD8+ lymfocyty

**„Polymyositis“
u pacienta s
myasthenia gravis**





Svalová biopsie v rámci thymektomie

m. sternothyreoideus

179 pacientů



18 pacientů (10,1 %)

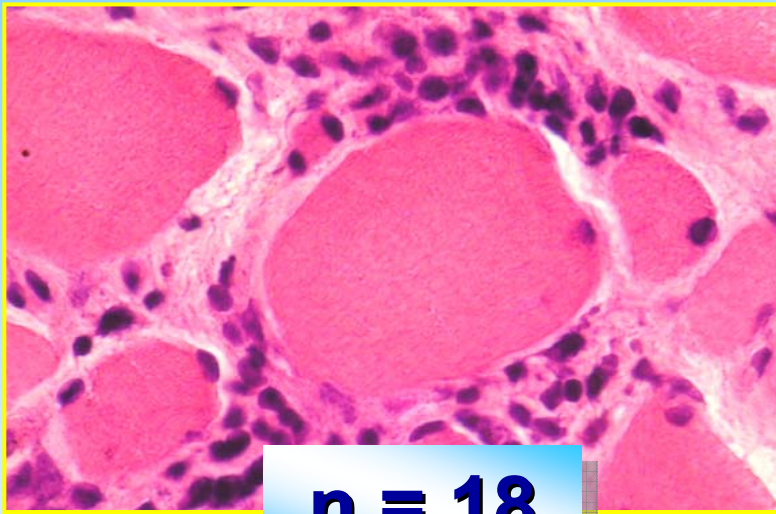
lymfocytární infiltráty („polymyositis-like“)

METODIKA

MYASTHENIA GRAVIS

x

POLYMYOSITIS



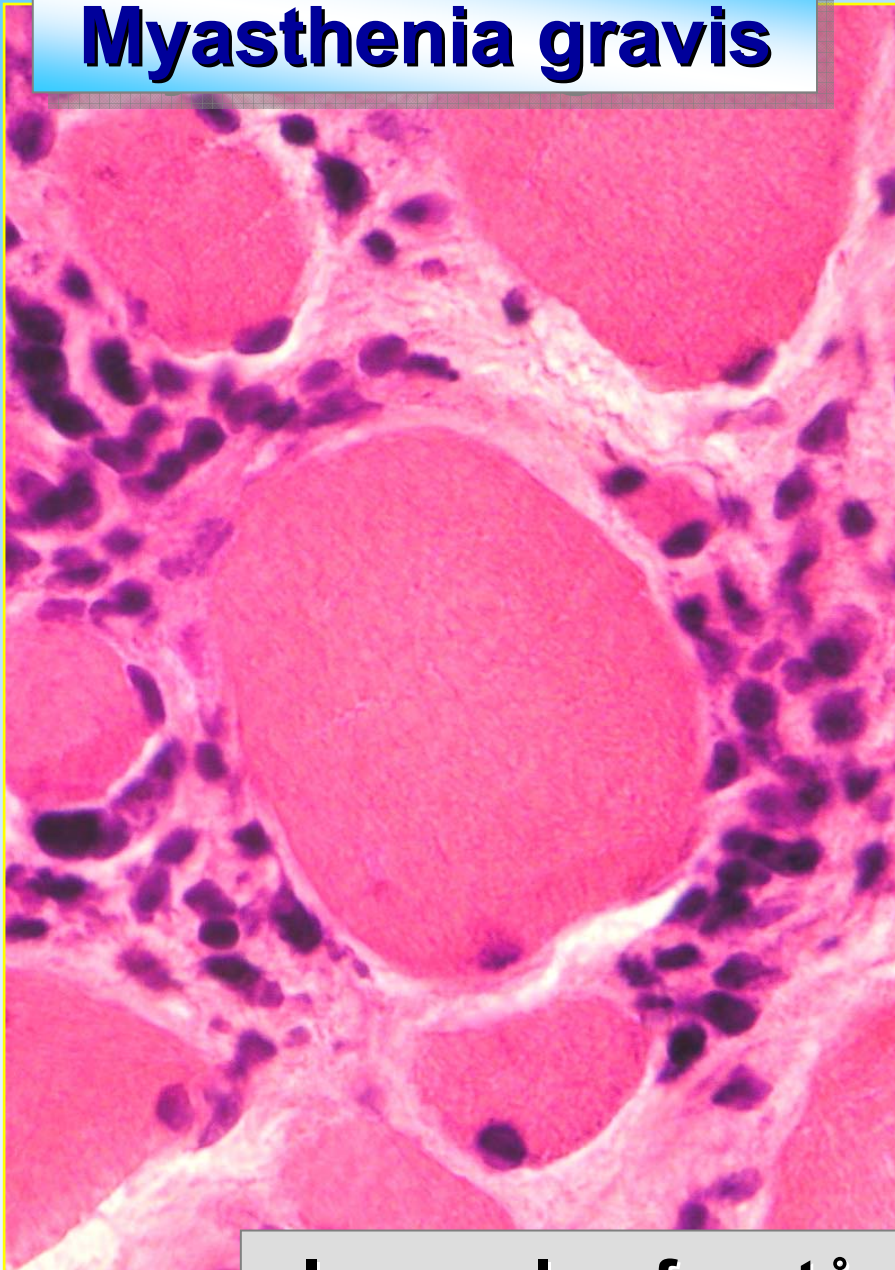
n = 18



n = 14

- morfologie
- IHC – hl. CD8, CD4, **CD45RA**, HLA-I
- KLINIKA

Myasthenia gravis



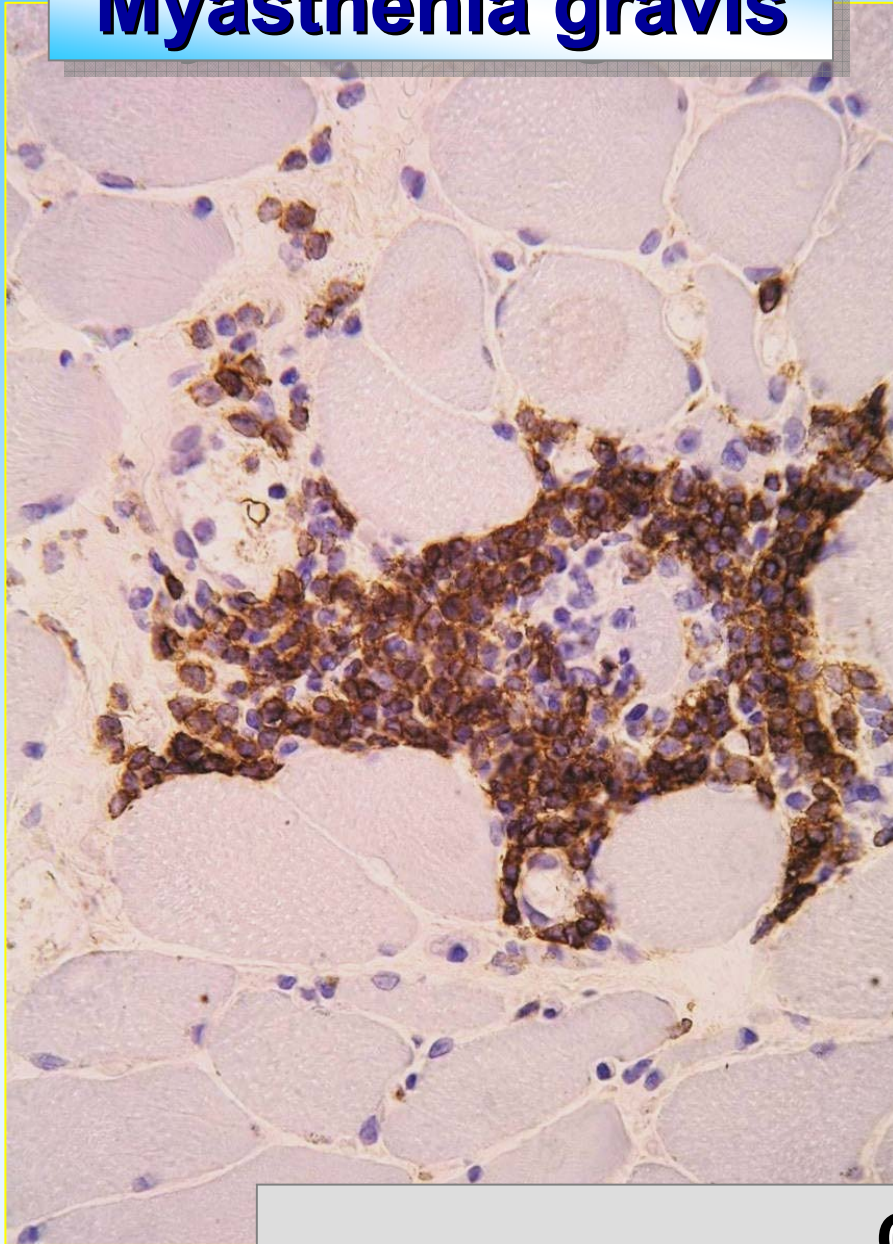
Polymyositis



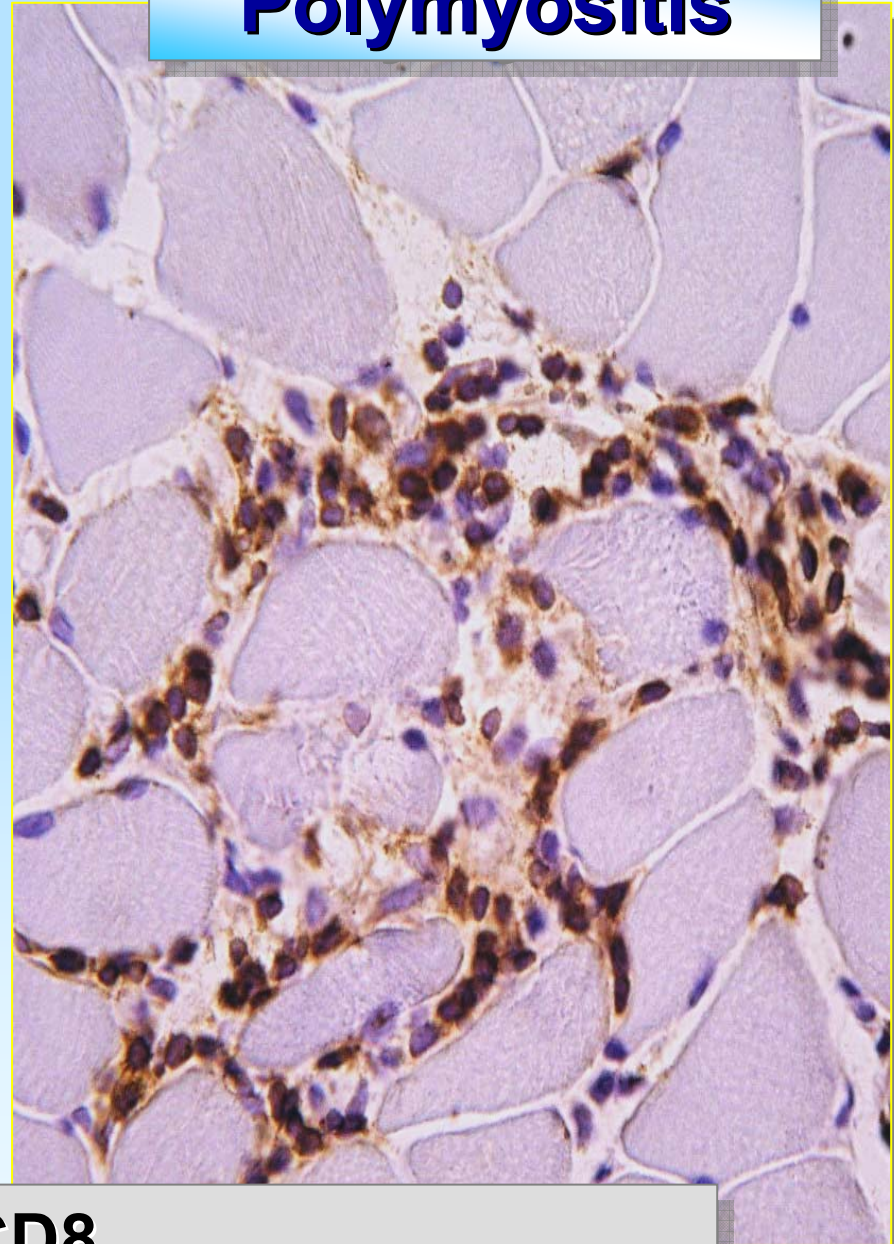
7 / 14

Invaze lymfocytů do svalových vláken

Myasthenia gravis

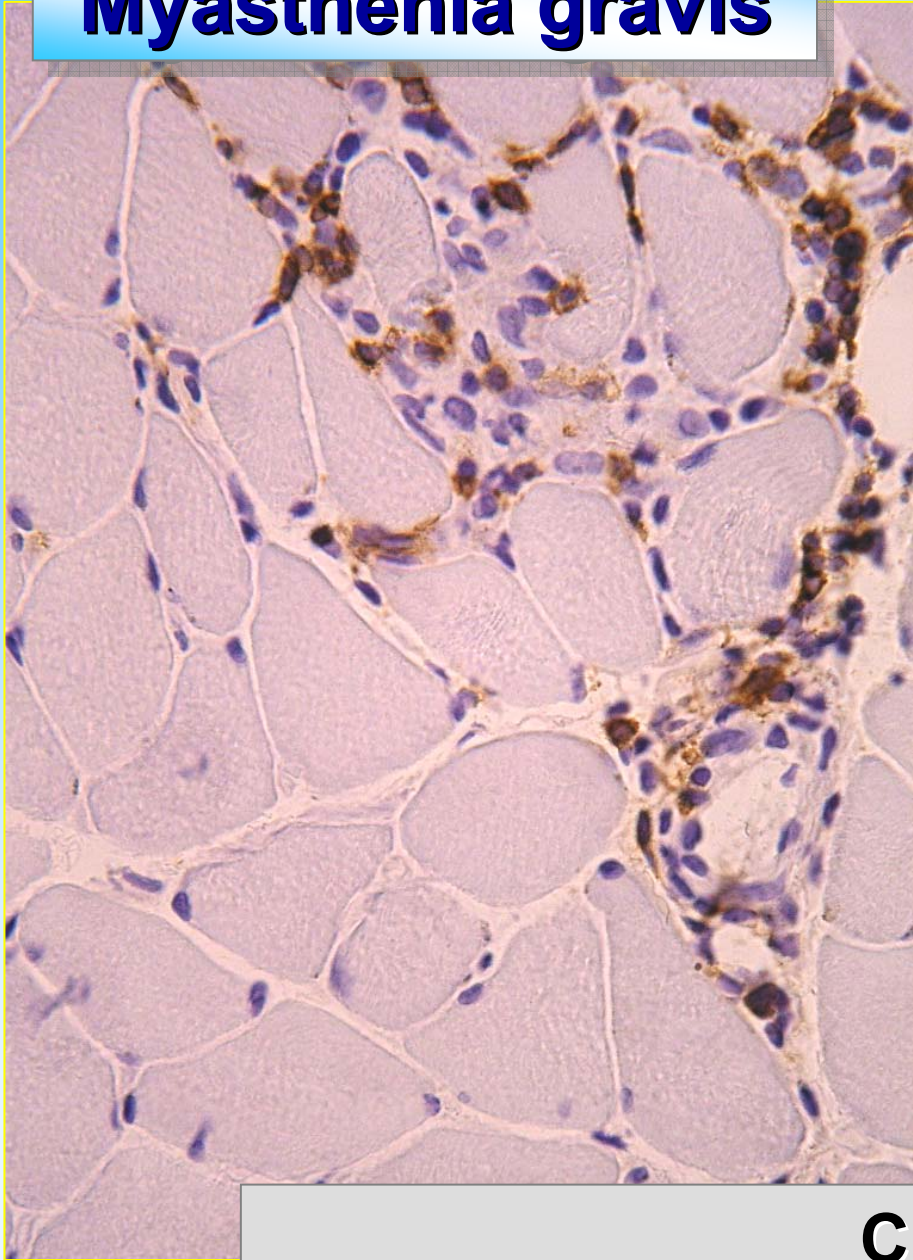


Polymyositis

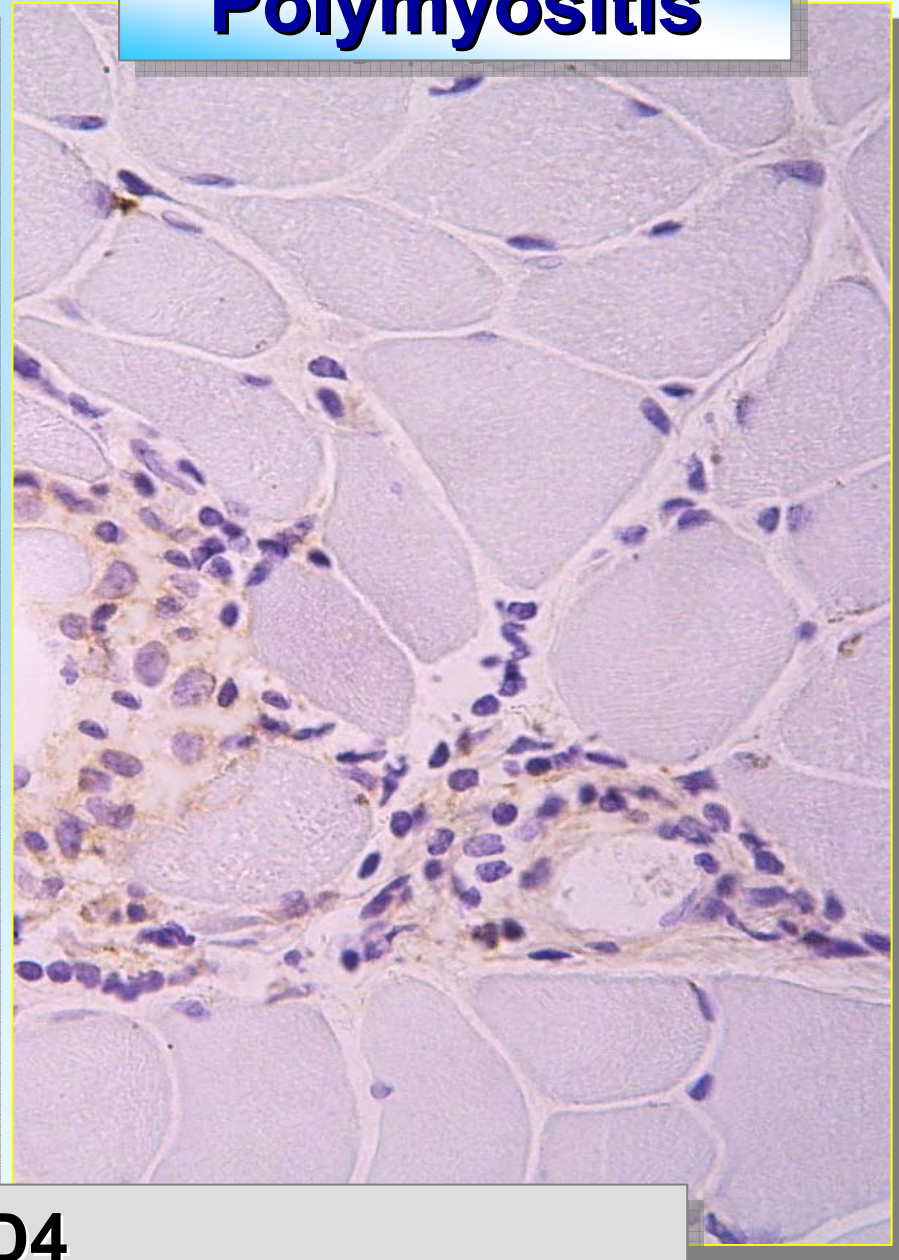


CD8

Myasthenia gravis

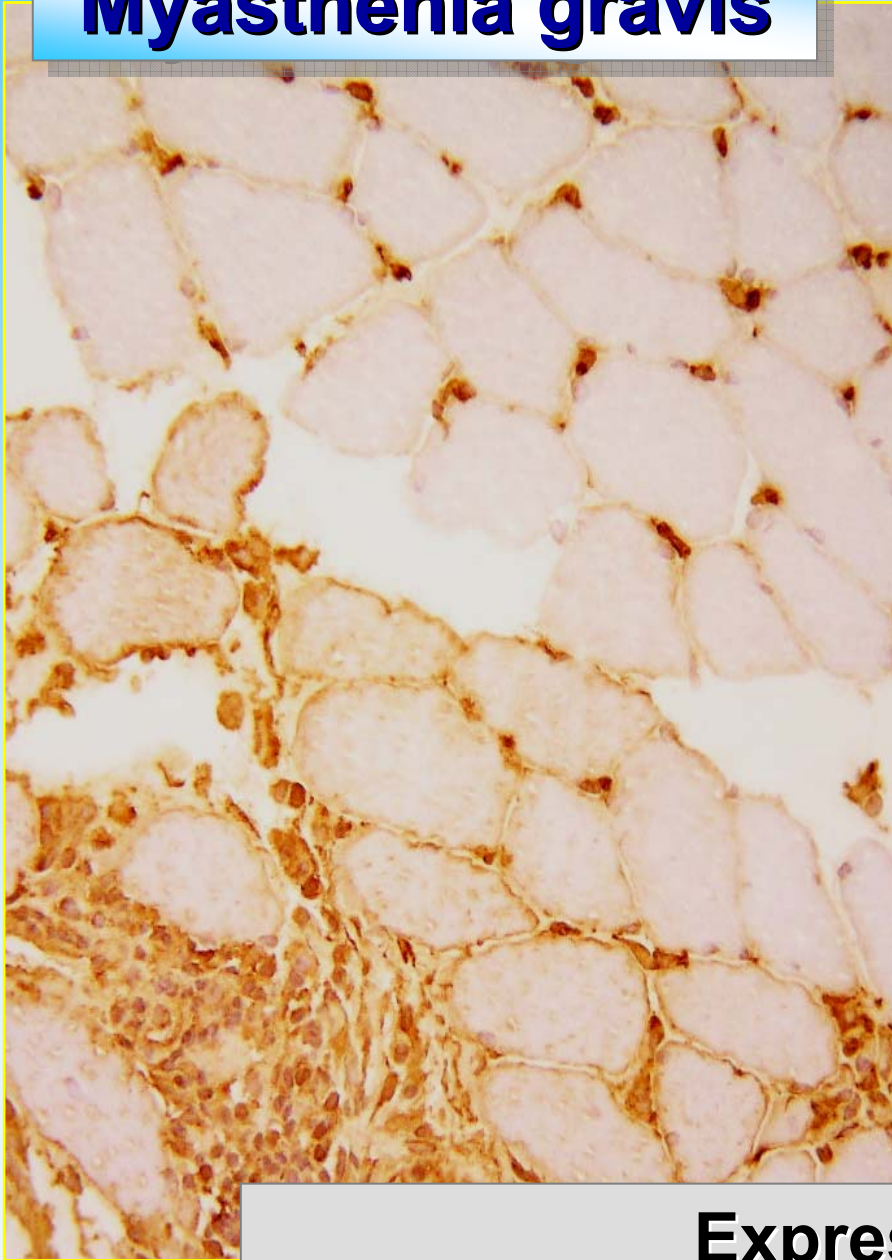


Polymyositis

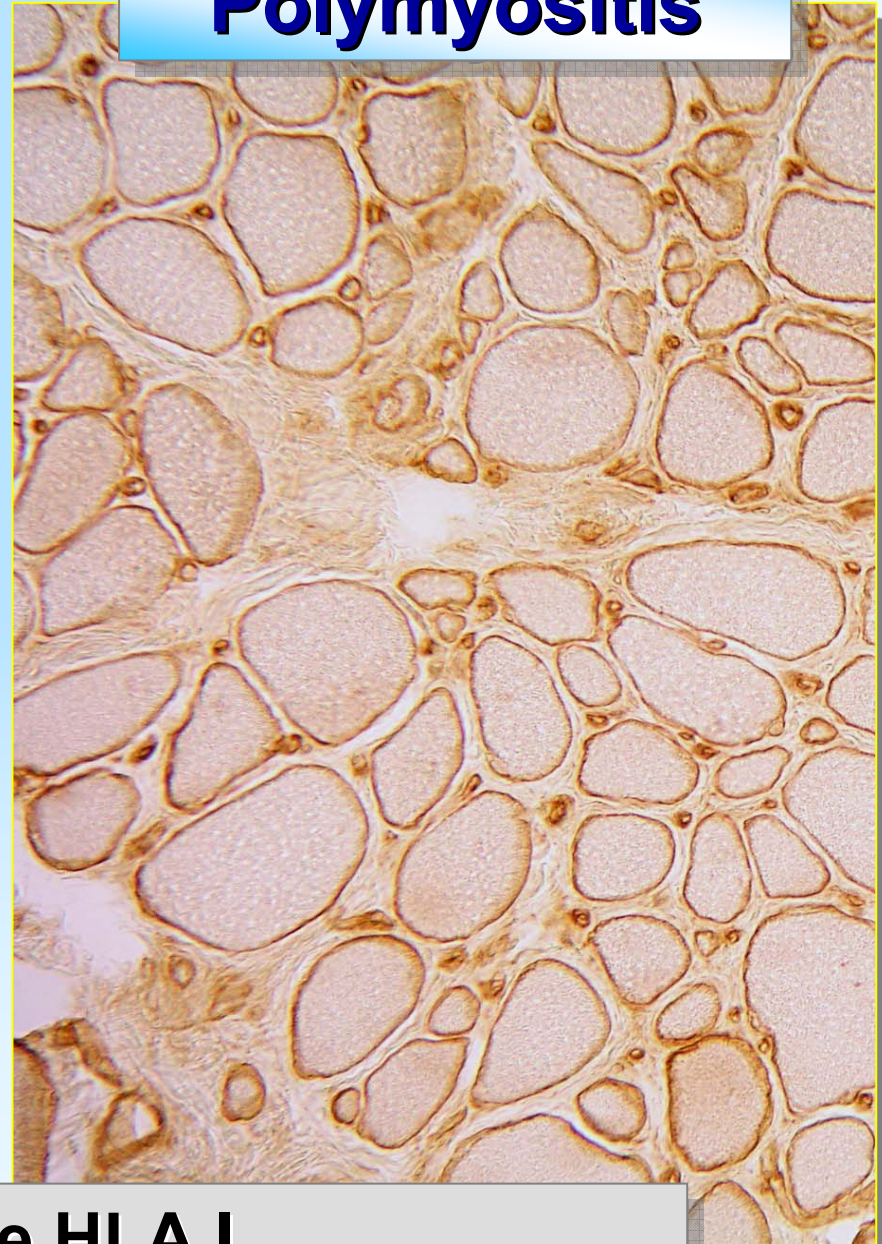


CD4

Myasthenia gravis

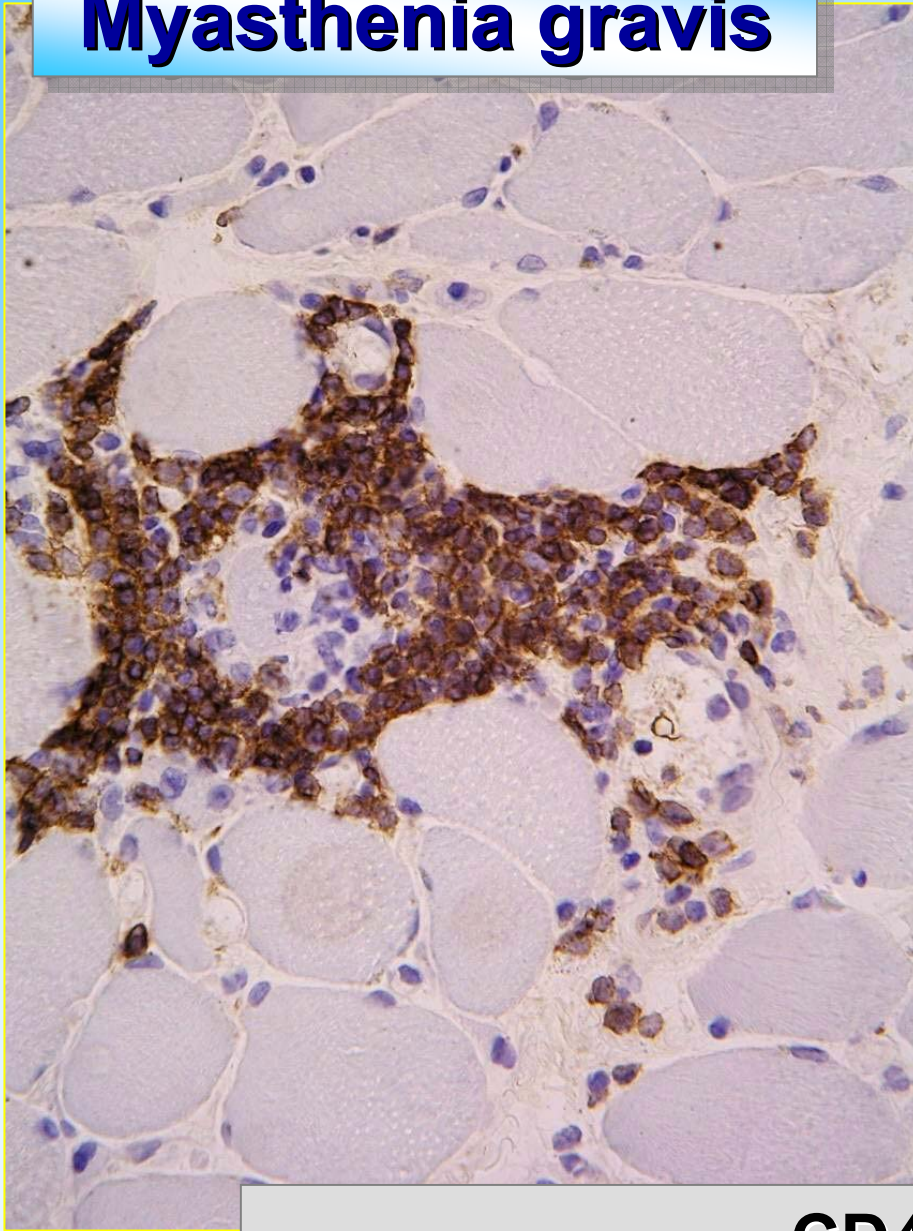


Polymyositis

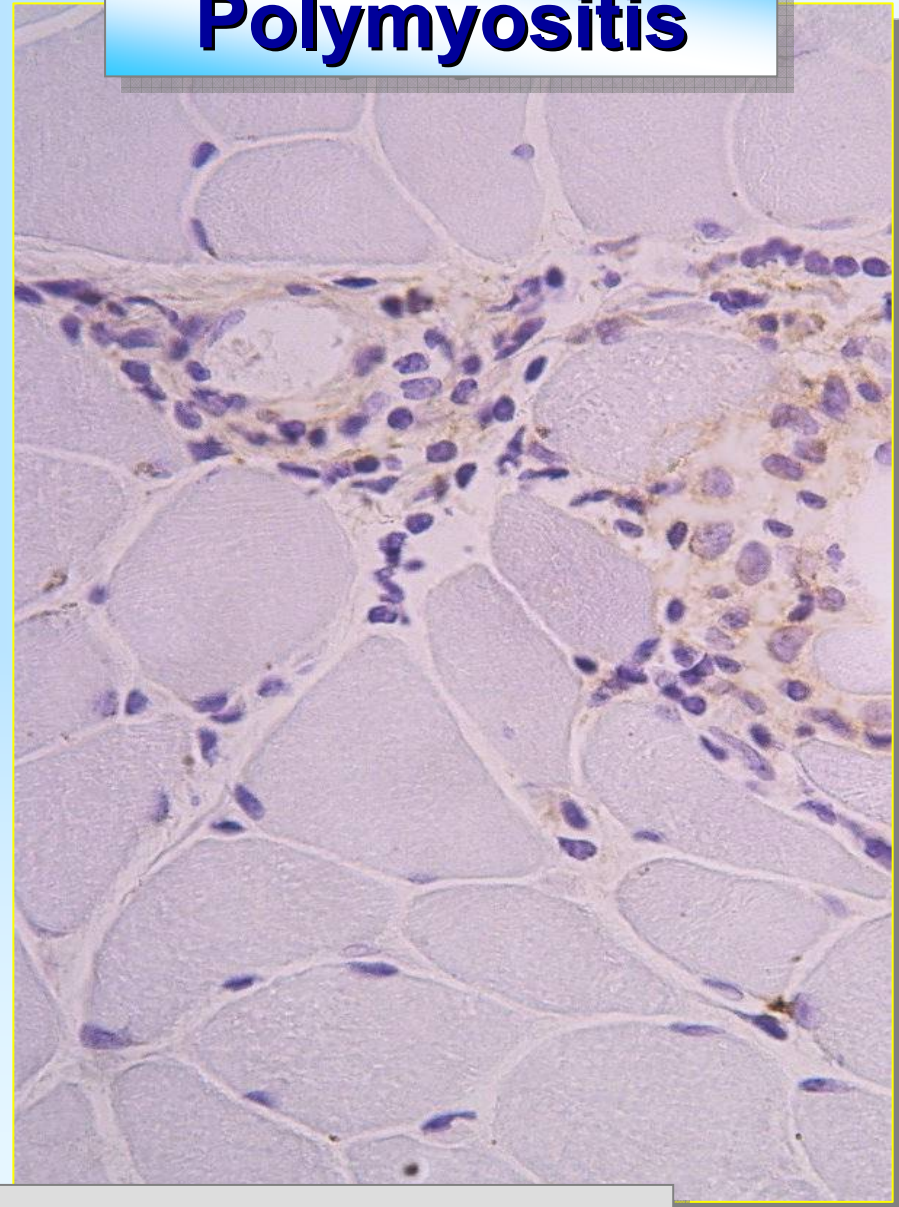


Expresse HLA I

Myasthenia gravis



Polymyositis



CD45RA

Myasthenia gravis

Polymyositis

u myasthenia gravis jsou lymfocyty

zralé ale panenské

= antigenně nestimulované

CD45RA





Thymomas alter the T-cell subset composition in the blood: a potential mechanism for thymoma-associated autoimmune disease

Viola Hoffacker, Anja Schultz, James J. Tiesinga, Ralf Gold, Berthold Schalke, Wilfred Nix, Reinhard Kiefer, Hans Konrad Müller-Hermelink, and Alexander Marx

Thymomas are the only tumors that are proven to generate mature T cells from immature precursors. It is unknown, however, whether intratumorous thymopoiesis has an impact on the peripheral T-cell pool and might thus be related to the high frequency of thymoma-associated myasthenia gravis. This study shows, using fluorescence-activated cell sorting-based analyses and T-cell proliferation assays, that thymopoiesis and T-cell function in thymomas correspond with immunologic alterations in the blood. Specifically, the proportion of circulating

CD45RA⁺CD8⁺ T cells is significantly increased in patients with thymoma compared with normal controls, in accordance with intratumorous T-cell development that is abnormally skewed toward the CD8⁺ phenotype. Moreover, it is primarily the proportion of circulating CD45RA⁺CD8⁺ T cells that decreases after thymectomy. The results also demonstrate that T cells reactive toward recombinant autoantigens are distributed equally between thymomas and blood, whereas T-cell responses to foreign antigen (ie, tetanus toxoid) are seen only

among circulating T cells and not among thymoma-derived T cells. These functional studies support the hypothesis that thymopoiesis occurring within thymomas alters the peripheral T-cell repertoire. Because many thymomas are enriched with autoantigen-specific T cells, a disturbance of circulating T-cell subset composition by export of intratumorous T cells may contribute to paraneoplastic autoimmune disease arising in patients with thymoma. ([Blood. 2000;96:3872-3879](#))

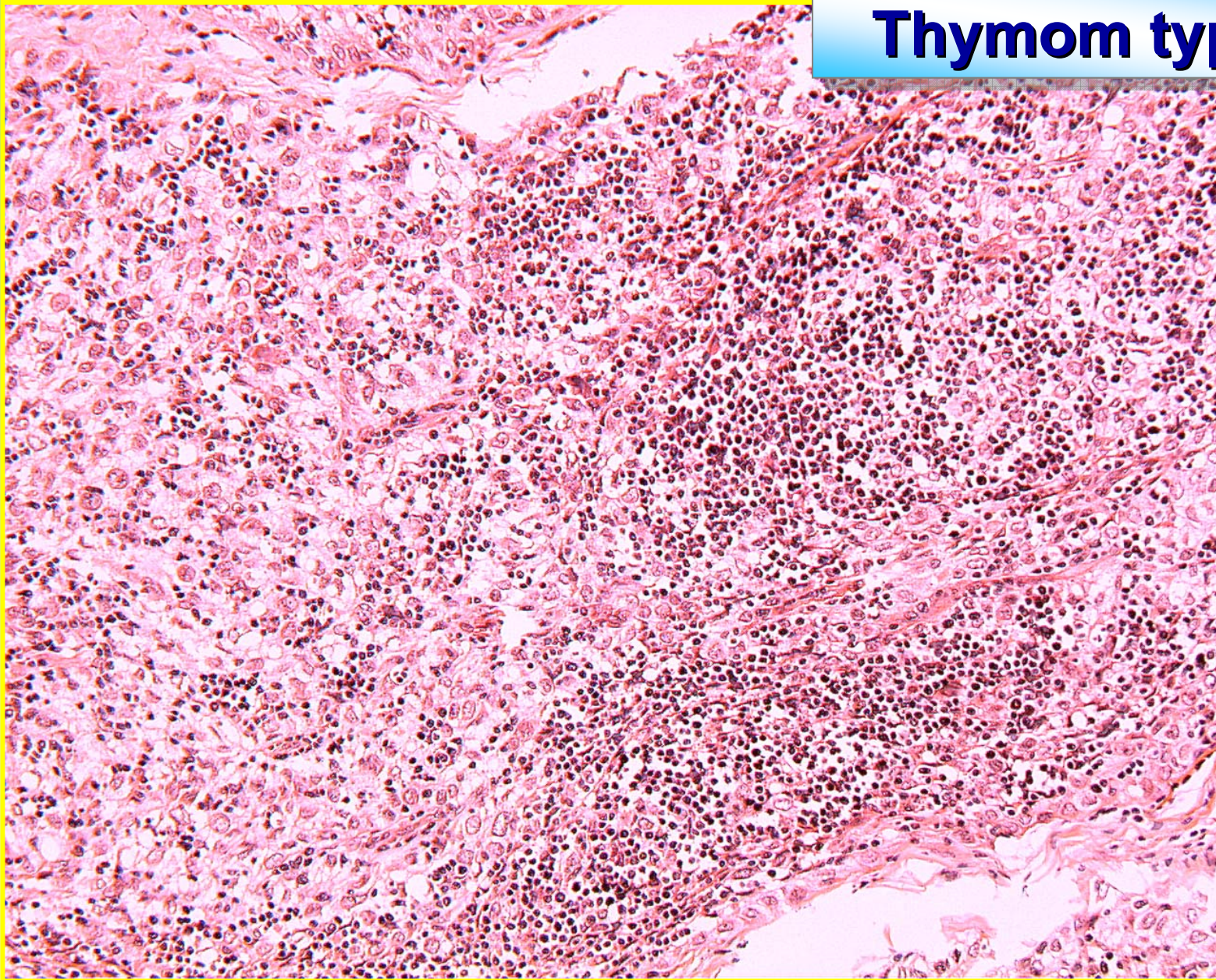
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Introduction

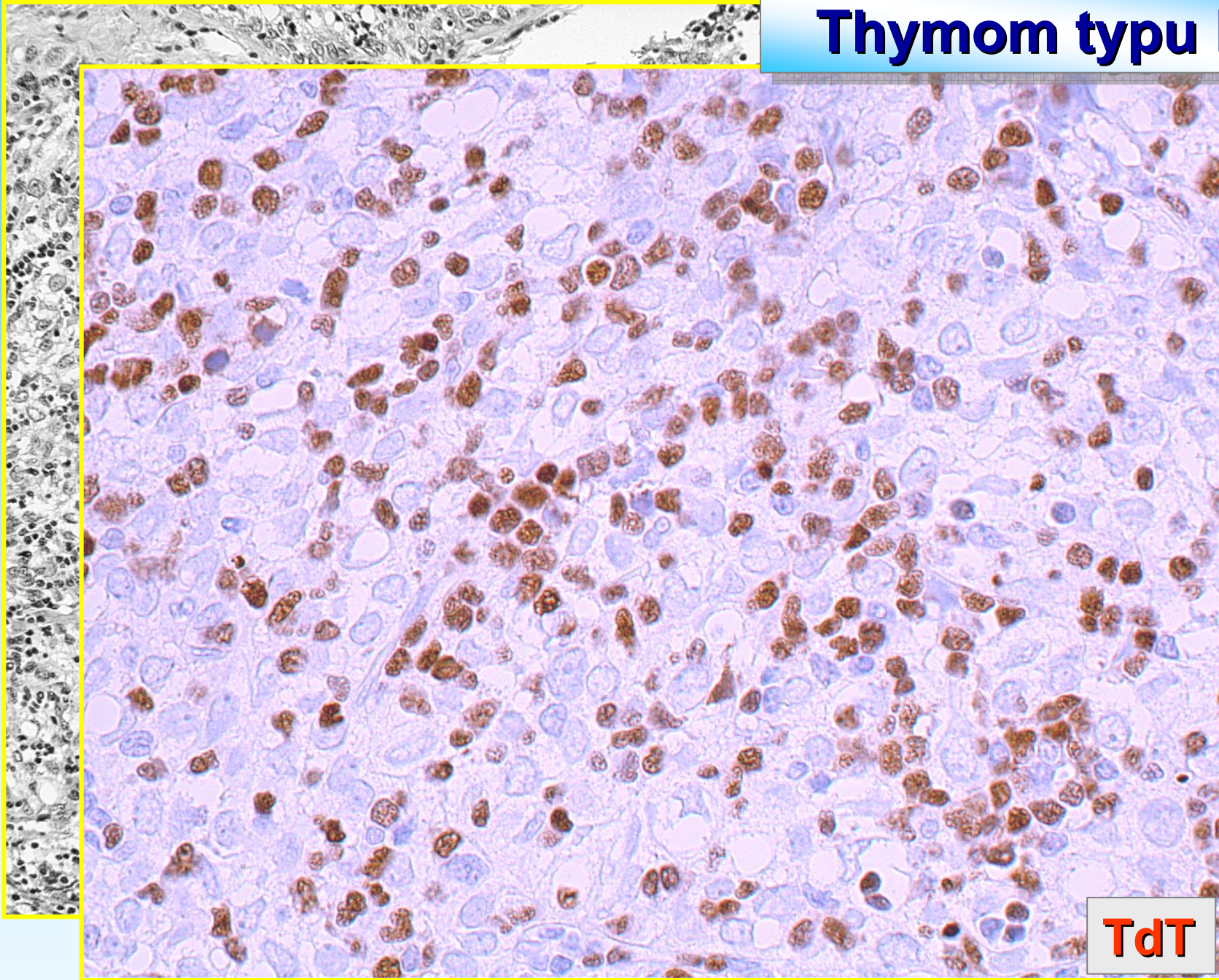
Ve vztahu k patologii thymu:

	<i>celkem</i>	<i>sval +</i>	<i>lymfocytóza</i>
Prostá atrofie thymu	57	0	0
Folikulární hyperplazie	91	0	0
THYMOM	31	18	9
<hr/>			
A	2	0	0
AB	3	1	0
B1	5	4	1
B2	16	9	6
B3	5	4	2

Thymom typu B2

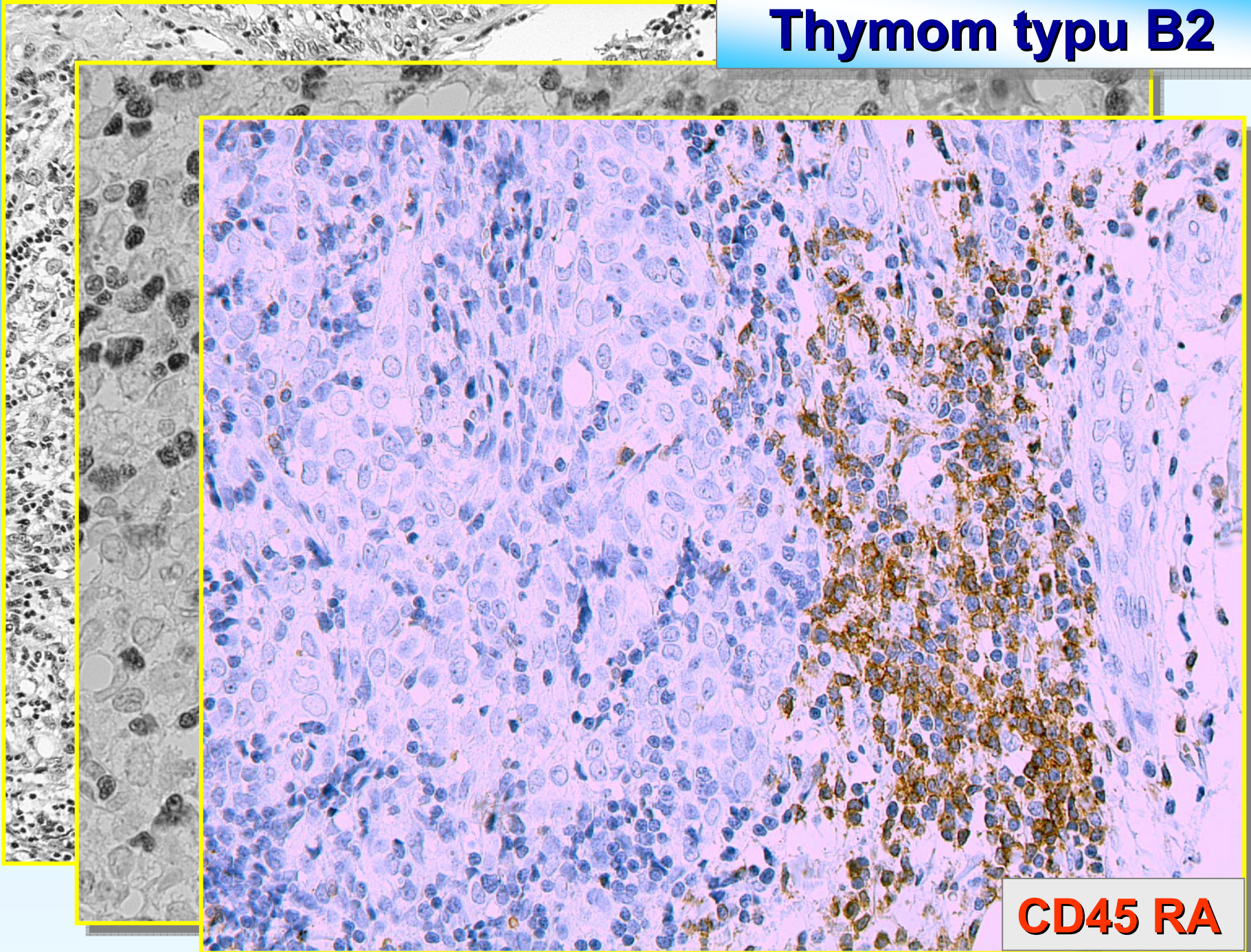


Thymom typu B2



TdT

Thymom typu B2



CD45 RA

Závěr

Lymfocyty v infiltrátech u MG:

- se liší od lymfocytů polymyositidy
- jsou tvořeny převážně CD45RA+CD8+ T lymf.
- pravděpodobně generovány thymomy bohatými na lymfocyty (typ B a AB)

CD45RA+ CD8+ lymfocyty → THYMOM