Analysis of soluble interleukin-2 receptor as cerebrospinal fluid biomarker for neurosarcoidosis

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Association of CSF sIL-2R with clinical and radiological disease activity as well as the CSF cell count in patients with neurosarcoidosis

A

B

C

D

n = 42
r = 0.8
p < 0.0001
(A) CSF sIL-2R in samples from patients with neurosarcoidosis obtained during clinically active disease (n = 15) or during clinical remission (n = 27). (B) Intraindividual course of CSF sIL-2R in patients with neurosarcoidosis that underwent 2 (n = 5) or 3 (n = 2) sequential lumbar punctures during clinically active disease phases and clinical remission. (C) CSF sIL-2R in samples from patients with neurosarcoidosis with (+; n = 11) or without (-; n = 4) diffuse leptomeningeal gadolinium enhancement on MRI. (D) Correlation of CSF sIL-2R and CSF cell counts in samples from patients with neurosarcoidosis (n = 42). Results of Spearman’s rank analysis are shown.

*p < 0.05

***p < 0.0005

CSF = cerebrospinal fluid; gd = gadolinium; n = number of data pairs available for analysis; r = Spearman’s rho; sIL-2R = soluble interleukin-2 receptor
Association of the sIL-2R CSF/serum quotient ($Q_{\text{sIL-2R}}$) with clinical and radiological disease activity as well as the CSF cell count in patients with neurosarcoidosis.

(A) $Q_{\text{sIL-2R}}$ in samples from patients with neurosarcoidosis obtained during clinically active disease ($n = 15$) or during clinical remission ($n = 27$). (B) Intraindividual course of $Q_{\text{sIL-2R}}$ in patients with neurosarcoidosis that underwent 2 ($n = 5$) or 3 ($n = 2$) sequential lumbar punctures during clinically active disease phases and clinical remission. (C) $Q_{\text{sIL-2R}}$ in samples from patients with neurosarcoidosis with (+; $n = 11$) or
without (-; n = 4) diffuse leptomeningeal gadolinium enhancement on MRI. (D)

Correlation of $Q_{\text{sIL}}$ and CSF cell counts in samples from patients with
neurosarcoidosis (n = 42). Results of Spearman’s rank analysis are shown.

* $p < 0.05$

*** $p < 0.0005$

CSF = cerebrospinal fluid; gd = gadolinium; n = number of data pairs available for
analysis; r = Spearman’s rho; $Q_{\text{sIL}}$ = sIL-2R CSF/serum quotient