Autoantibodies: The mystery revealed

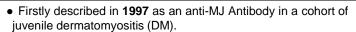
Connective Tissue Diseases

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• Antigen target: Nuclear Matrix Protein NXP 2 (also called MORC3): a 140 kDa protein localized in promyelocytic bodies within the nucleoplasm.

- Family: Myositis-specific autoantibodies (MSAs)
- Mainly associated with juvenile DM with a high specificity (95%-98%) and low sensitivity (1-1.5%)

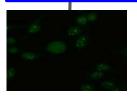
Reported frequency: 1 to 20% (1-2% in adults)

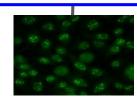
Screening technique:

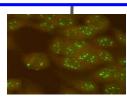
Indirect immunofluorescence (IIF) on HEp-2 cells These aspects are not always as typical (may only be

detectable at low serum dilutions of less than 1/160)

IIF pattern on HEp-2 cells: nuclear labeling with a dot-like appearance since the target antigen is closely associated with the nuclear matrix

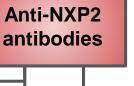






Confirmation techniques:

- Line/dot blot immunoassays
- **ELISA**
- laser bead immunoassay (ALBIA)
- Immunoprecipitation (IP)











Disease is not commun

Calcinosis ++

Prognosis:

- In American College of Rheumatology guidelines of 2022: Considered as a highrisk factor in the criterias for IIM-associated cancer risk
- Association with cancer is mostly in adult forms
- ⇒ in adult anti-NXP2 IIM: mandatory enhanced cancer screening at diagnosis

Basic screening at 1, 2 and 3 years after IIM onset

No evidence to suggest that the presence of anti-NXP2 Ab confers a poor prognosis with respect to overall survival.

