

and formation of residual nodules. A systematic immunohistochemical and immunofluorescence study of DRG in 15 FA cases and 12 controls, however, supports the conclusion that frataxin deficiency in FA primarily affects satellite cells, and that loss of ganglion cells is due to failing trophic support and inflammatory infiltration.

A panel of antibodies was used to reveal the cytoplasm of satellite cells (S100 α , glutamine synthase, excitatory amino acid transmitter 1, glial fibrillary acidic protein), the inward-rectifying potassium channel (Kir4.1), gap junctions (connexin 43), basement membranes (laminin-2), mitochondria (ATP synthase β -subunit [ATP5B] and frataxin), and monocytes (CD68, CD14, and IBA1). Reaction product of the cytoplasmic markers and laminin-2 confirmed proliferation of satellite cells into multiple perineuronal layers and residual nodules. Connexin 43-reactive gap junctions were greatly increased. The additional satellite cells displayed enhanced mitochondrial ATP5B but lacked frataxin fluorescence. DRG monocytes in FA cases were more abundant than normal, separated satellite cells from neurons, and participated in the formation of residual nodules. (Supported by NIH R01NS069454 and Friedreich's Ataxia Research Alliance).

CONFLICTS OF INTEREST:

None.

TITLES OF DIAGNOSTIC CASE PRESENTATIONS

1. Neurocutaneous melanocytosis associated diffuse leptomeningeal melanocytosis

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2. Embolic catheter material; presumed cause of haemorrhage

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3. Meningioangiomas

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4. Hereditary Cerebral Hemorrhage With Amyloidosis-Dutch type (HCHWA-D)

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5. IgG4-related perineurial disease

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6. Graft versus host disease of the brain

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7. Myxopapillary ependymoma with anaplastic features

Y.A. Alwelaie^{1,2}, J.A. Maguire^{1,2}, K. Dorovini-Zis^{1,2}, F. Vice^{2,4}, M.C. Boyd^{1,2}, M.R. McKenzie^{2,3}, M.Z. Matishak^{2,4}, J. Shewchuk^{1,2}, G. Sidhu^{2,4}, G.R.W. Moore^{1,2}

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8. Textiloma mimicking recurrent GBM

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9. Epithelioid hemangioendothelioma

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10. Amelanotic melanocytoma

Reena Baweja, Boleslaw Lach, Kesava Reddy

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11. Congenital spinal lipoma with divergent differentiation including skeletal muscle and primitive nephrogenic tissue suggestive of nephrogenic rest

Z. Al-Hajri¹, C. Dunham²

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12. Aicardi-Goutières Syndrome

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13. Embryonal tumor with multilayered rosettes (ETMR), most in keeping with ependymoblastoma, exhibiting extensive post treatment neuroglial maturation

V. Hirsch-Reinshagen, J. Hukin, C. Dunham

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14. Tubular aggregate myopathy

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15. Granulomatous myositis in a body builder, secondary to injections of veterinarian brands of anabolic steroids

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