tween what we found on the island of Als, Denmark (60.7 years) and in the Faroe Islands (64.2 years). The mean age at treatment was 62.1 years and is even lower than in both Denmark and the Faroe Islands (63.7 vs 66.3), suggesting that when they were diagnosed they were treated rapidly but diagnosed at a more advanced stage, which explains the higher mean score on the Hoehn and Yahr scale (2.8 vs 2.5 and 2.5).

We foresee that the number of patients with PD and the crude prevalence will increase in the future because of the aging of the population and because of more accurate diagnosing.

The causes of the high rate is not known, but high organochlorine concentrations have been found among the Inuits and are attributed to a life-long high intake of seafood.⁹ In a study of caudate nucleus obtained postmortem from patients with PD and controls, there were significantly higher concentrations of some organochlorine compounds in the PD tissue. The susceptibility to the effects of organochlorine compounds could be those with genetic polymorphisms of the cytochrome P450 involved in organochlorine metabolism.¹⁰ The Inuits may have a genetic susceptibility to the effects of organochlorine.

References

1. Bjerregaard P, Young TK. The circumpolar Inuit. Health of a population in transition. Copenhagen: Munksgaard, 1998.
2. Wermuth L, Joensen P, Bünger N, Jeune B. High prevalence of Parkinson's disease in the Faroe Islands. *Neurology* 1997; 49:426–432.
3. Wermuth L, von Weitzel-Mudersbach P, Jeune B. A twofold difference in the age-adjusted prevalences of Parkinson's disease between the island of Als and the Faroe Islands. *Eur J Neurol* 2000;7:655–660.
4. de Pedro-Cuesta J, Wermuth L, Abaira V, Stawiarz L, for the Europarkinson Preparatory Activity Research Group. Levodopa use in Denmark: high levels in Greenland and the Faroe Islands. *Acta Neurol Scand* 1995;91:89–97.
5. Gudmundsson KRA. A clinical survey of Parkinsonism in Iceland. *Acta Neurol Scand* 1967;43(suppl 33):9–61.
6. Calne DB, Snow BJ, Lee C. Criteria for diagnosing Parkinson's disease. *Ann Neurol* 1992;32:S125–S127.
7. Quinn N. Parkinsonism: recognition and differential diagnoses. *BMJ* 1995;310:447–52.
8. Statistics Greenland. The population of Greenland, January 1, 2000 [in Greenlandic and Danish]. Nuuk 2000.
9. Bjerregaard P, Dewailly E, Ayotte P, Pars T, Ferron L, Mulvad G. Exposure of Inuit in Greenland to organochlorines through the marine diet. *J Toxicol Environ Health* 2001;62: 69–81.
10. Corrigan FM, Murray L, Wyatt CL, Shore RF. Diorthosubstituted polychlorinated biphenyls in caudate nucleus in Parkinson's disease. *Exp Neurol* 1998;150:339–342.

Neuro Images

Figure. Postcontrast (gadopentetate dimeglumine) sagittal T1-weighted MR study (repetition time, 20 milliseconds; echo time, 4.6 milliseconds; flip angle, 30°; slice thickness, 1.5 mm) during the headache shows meningeal enhancement, suggesting vasodilatation of meningeal vessels in the fronto-temporal region (A), and after release of the headache shows normalization of vessel caliber (B).

MRI during postangiography headache

S. Kremer, MD, S. Grand, MD, Y. Dananchet, MD, L. Minotti, MD, G. Besson, MD, PhD, A. Ait Ameur, MD, P. Kahane, MD, J.F. Le Bas, MD, PhD, Grenoble, France

A 34-year-old patient, with no history of migraine, who suffered from drug-resistant partial seizures related to a right frontal cortical dysplasia, underwent a right carotid arteriography as part of presurgical evaluation. After the examination, he experienced pulsating right hemicrania, associated with nausea, vomiting, photophobia, and phonophobia, which fulfilled the International Headache Society criteria for migraine without aura, except that only one attack had occurred.¹ Twenty-four hours after the begin-

ning of the headache, an MRI performed after administration of gadopentetate dimeglumine showed vasodilatation of meningeal vessels in the right fronto-temporal region, overlying the cortical dysplasia. MRI performed after headache disappearance demonstrated normalization of meningeal vessel caliber (figure). These MRI examinations suggest the possible role of vasodilatation in the pathogenesis of migraine-like, postangiography headache.²

1. Ramadan NM, Gilkey SJ, Mitchell M, et al. Postangiography headache. *Headache* 1995;35:21–24.
2. Friberg L, Olesen J, Iversen HK, et al. Migraine pain associated with middle cerebral artery dilatation: reversal by Sumatriptan. *Lancet* 1991; 338:13–17.

Neurology[®]

MRI during postangiography headache

S. Kremer, S. Grand, Y. Dananchet, et al.

Neurology 2002;58;1425

DOI 10.1212/WNL.58.9.1425

This information is current as of May 14, 2002

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/58/9/1425.full
References	This article cites 2 articles, 0 of which you can access for free at: http://n.neurology.org/content/58/9/1425.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Headache http://n.neurology.org/cgi/collection/all_headache All Imaging http://n.neurology.org/cgi/collection/all_imaging MRI http://n.neurology.org/cgi/collection/mri
Permissions & Licensing	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: http://www.neurology.org/about/about_the_journal#permissions
Reprints	Information about ordering reprints can be found online: http://n.neurology.org/subscribers/advertise

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright . All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.