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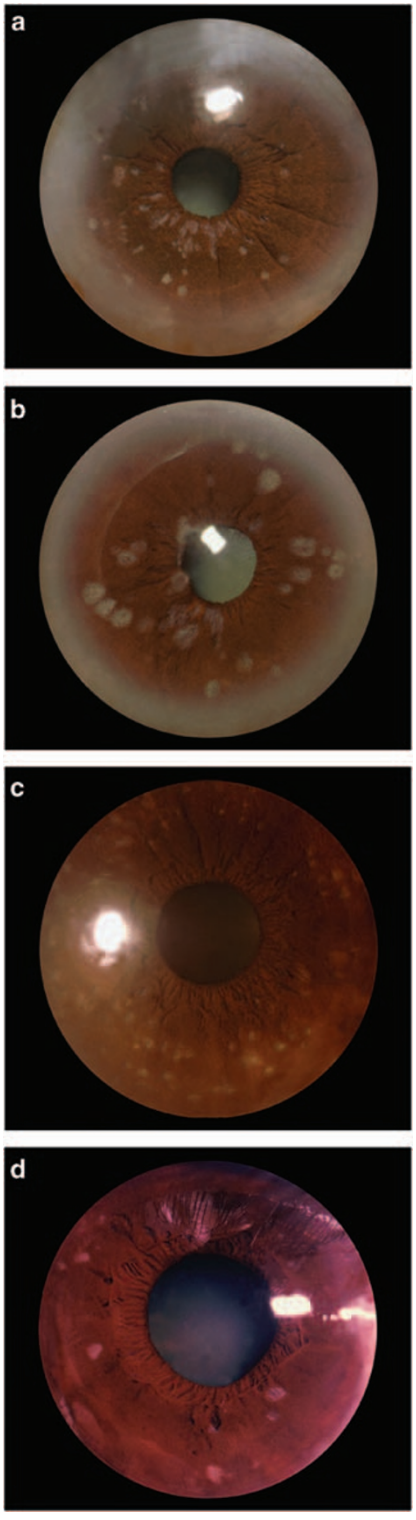
Sir,

Vitiligo iridis in patients with a history of smallpox infection

Smallpox is caused by infection with the orthopoxvirus variola.[1] Declared eradicated by the World Health Assembly in 1980,[2] smallpox has been reported to be associated with early ocular complications in 5–10% of patients. Typical early ocular complications of variola infection included periocular and conjunctival pustules, conjunctival phlyctenuels, ulcerative keratitis, and iritis.[1] Scar formation after acute corneal infection was the most common cause of vision loss in patients with smallpox, accounting for up to one-third of all blindness in Europe before the introduction of an effective vaccine.[3] Although studies from the early part of the twentieth century reported focal areas of iris atrophy termed vitiligo irides as a late complication in up to 50% of patients with smallpox,[4] few reports have provided a detailed description of this finding[5] and none have provided high-quality photographic images.



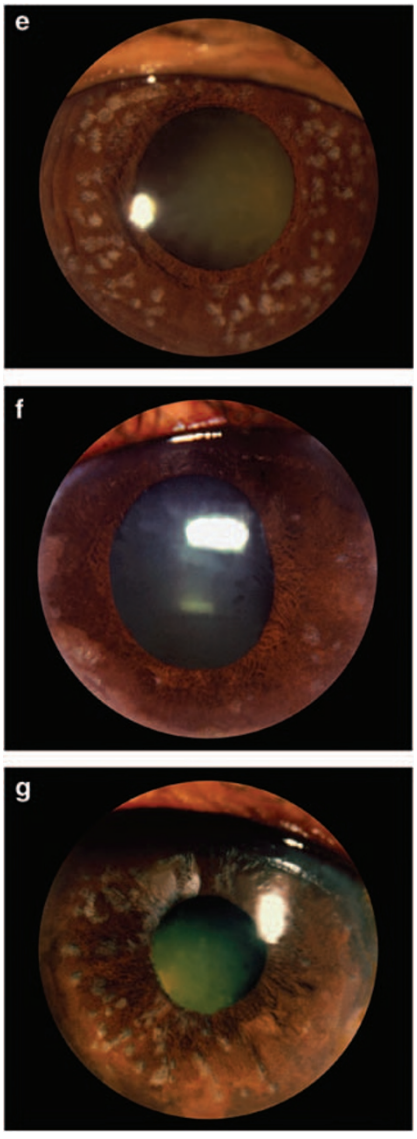


Figure 1 Slit-lamp photographs showing multifocal vitiligo iridis in seven patients (cases A–G) with a remote history of smallpox infection.

Table 1 Clinical characteristics of patients with multifocal vitiligo iridis and a remote history of smallpox infection

Case	*Sex*	*Age at presentation (years)*	*Age with smallpox (years)*	*Eye(s) involved*	*Eye shown (Figure 1)*	*BCVA*	*Other ocular findings*
A	M	75	7	OS	OS	6/12 OU	Cataract OU
B	M	75	14	OD	OD	HM OD; 6/36 OS	Cataract OU
C	F	41	4	OU	OS	20/20 OU	Cataract OU
D	F	60	10	OU	OS	6/90 OD; 6/24 OS	Cataract OU
E	M	59	5	OU	OD	6/24 OU	Cataract OU
F	M	68	8	OU	OS	6/12 OU	Cataract OU
G	M	70	9	OU	OD	6/18 OD 6/12 OS	Cataract OU

Abbreviations: BCVA, best-corrected visual acuity; OD, right eye; OS, left eye; OU, both eyes; HM, hand motion.

Case report

We describe seven patients who were found to have multifocal vitiligo iridis in one eye or in both, 37–60 years after a history of smallpox infection (Table 1). The areas of iris atrophy varied in size (Figure 1) and were bilateral in five of the seven (71.4%) patients (Table 1). Past ocular history was otherwise notable for varying degrees of nuclear sclerotic cataract in all seven patients and for mild myopia in one patient. No patient had a history or signs of herpetic eye disease, or of previous eye trauma or surgery.

Comment

Although 2010 marks the thirtieth anniversary of the global eradication of smallpox, as recently as 1967 when the World Health Organization (WHO) launched an intensified plan to eradicate the disease, variola virus was estimated to infect 15 million people annually worldwide (WHO Smallpox Factsheet; http://www.who.int/mediacentre/factsheets/smallpox/en/). Three of every four people infected with smallpox survived, and so a large number of those infected before 1980 still survive, particularly in Africa and Asia, including India. Many of these patients are now approaching an age when they might be expected to seek eye care, most commonly for cataract, as in our cohort. The recognition of vitiligo iridis as a late complication in patients with a remote history of smallpox infection is therefore important to help prevent misdiagnosis as an unrelated cause of focal or multifocal iris atrophy, most notably herpetic eye disease.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

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SR Rathinam[1] and ET Cunningham Jr[2,3]

[1]Aravind Eye Hospital & Postgraduate Institute of Ophthalmology, Madurai, Tamil Nadu, India
[2]Department of Ophthalmology, California Pacific Medical Center, San Francisco, CA, USA
[3]Department of Ophthalmology, Stanford University School of Medicine, Stanford, CA, USA
E-mail: emmett_cunningham@yahoo.com

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Sir,

Attitudes of patients and relatives/carers towards genetic testing for inherited retinal disease

Inherited retinal diseases are an important cause of congenital and acquired visual disability.[1] Over the last decade, there has been an exponential increase in the number of genes implicated in inherited retinal disease, and currently >200 genes and loci are known to be involved (http://www.sph.uth.tmc.edu/Retnet/home.htm). Genetic testing for inherited retinal disease offers a number of potential benefits and there is enthusiasm for testing among clinicians.[2,3] With the increasing availability of genetic testing for inherited retinal diseases, the views of those affected and their relatives are important, but are rarely sought.[4] We conducted a pilot survey of delegates at the national conference of the Retina Awareness Group in 2009 to