

Letter to the Editor

Sir;

We read with interest Twomey and Leaver's report of 12 cases of retinal compression folds after surgery for acute bullous retinal detachment (Eye 1988;2:283-7) using circumferential buckles. All patients had had internal tamponade. Their reasonable conclusion was that folds associated with the buckle and with rapid reduction of the detachment were compressed by the gas (usually) or silicone. However we have recently observed similar gross folding due to retinal redundancy alone:

Case history

A 56 year old emmetropic Jamaican lady with a four day history of progressive field defect was found to have a large supero-temporal bullous detachment arising from tears in lattice degeneration and involving the macula. A 4mm circumferential sponge was applied through 120 degrees in this quadrant. We did not inject air, and drainage of subretinal fluid was limited. Post-operatively there was massive redundancy of the retina which was loosely draped in coarse irregular folds in front of the pigment epithelium. Within four weeks the retina became flat but there were three prominent radial folds across the indent (Fig. 1), one extending through the macula (Fig. 2).

This retinal stretching was greater than we have ever seen before and although an unusual case it illustrates firstly that intraocular gas is not always implicated in the formation of large retinal "compression" folds and secondly that even in the presence of gross retina to pigment epithelial surface area mismatch, retinal tensioning perpendicular to the long axis of a scleral buckle [1] prevented formation of all but radial folds.

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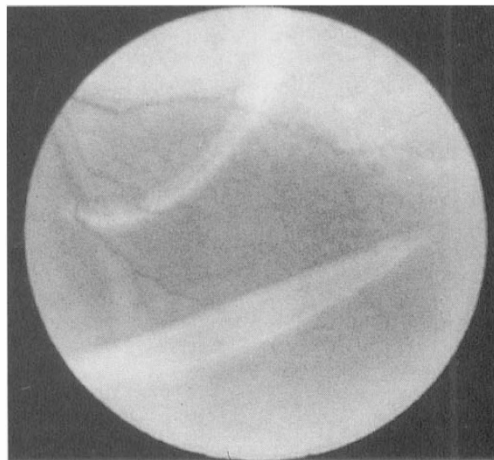


Fig. 1. Fundus photograph of peripheral temporal retina illustrating large radial retinal folds across the indentation.

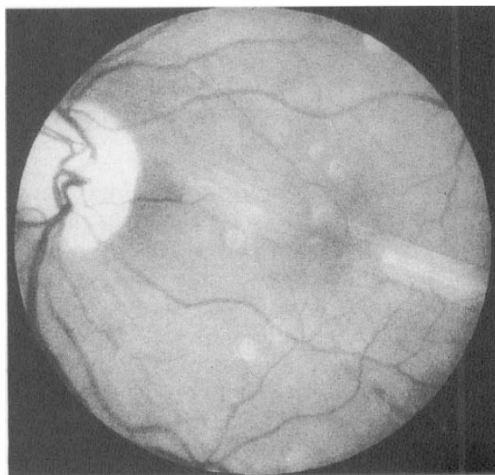


Fig. 2. One of the retinal folds extended from the indent through the macula.

¹ Goldbaum MH, Smithline, M, Poole TA, Lincoff HA: Geometric analysis of radial buckling. *Am. J. Ophthalmol.* 1975; **79**: 958-65.