## Letter to the Editor

## TITLE PAGE

## Authors:

Ivan S. Login, M.D. Jessica Login, M.S. Jason C. Bennett, B.A.

Title: Selective pituitary tumor apoplexy apparently reversed acromegaly in Governor Pio Pico between 1858 and 1873.

## **Affiliations:**

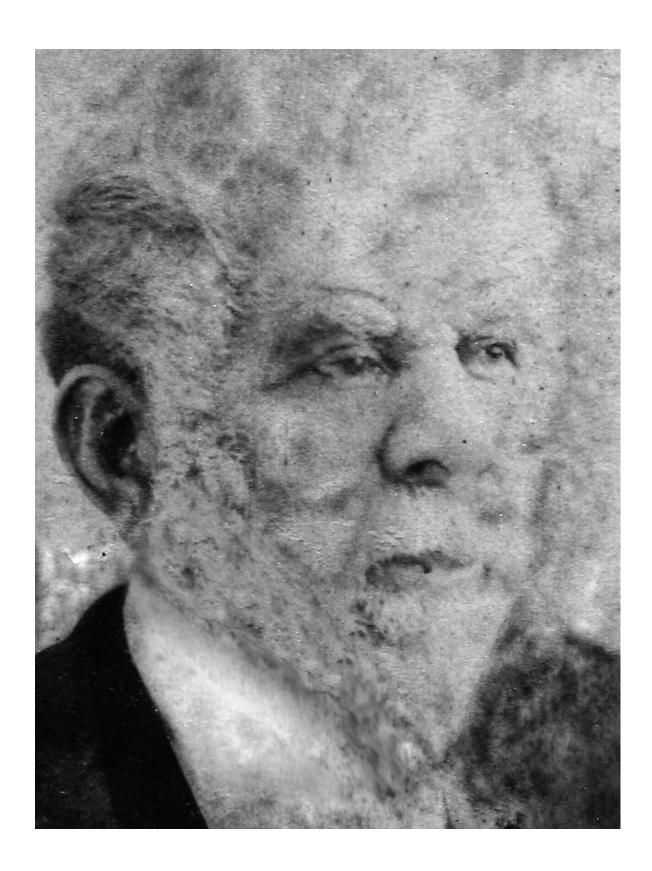
ISL (Corresponding Author): University of Virginia Health System, Department of Neurology, Box 800394, Charlottesville, VA 22908, USA. Phone 434 924 5535. Fax: 434 982 1726. email: isl@hscmail.mcc.virginia.edu

JL: Washington Elementary School, 825 Taylor Avenue, Alameda, CA 95401, USA

JCB: University of Virginia Health System, Health Sciences Digital Media Consultant, Box 800722, Charlottesville, VA 22908, USA Pio Pico, the last Mexican Governor of California, was profoundly acromegalic in 1858 (age 57). At that time he also demonstrated absent facial hair, loss of lateral eyebrows and dysconjugate gaze suggesting secondary gonadotropin and thyrotropin deficiency and pituitary tumor invasion into the cavernous sinus (1, 2). The existing historical record left a photographic gap between 1858 and the 1890s when Pico then appeared essentially normal. He showed conjugate eye position, full eyebrows, a robust beard, delicate fingers and hands and little facial evidence of acromegaly, all suggesting that spontaneous selective pituitary tumor apoplexy occurred sometime between age 57 and about 90.

Now, a recently obtained photograph of Pio Pico (Fig 1) adds poignant detail to the timeline for his presumed selective pituitary tumor apoplexy. The new image was poorly maintained but conservative photographic restoration demonstrates that his pituitary tumor had already regressed by 1873 (age 72). His facial appearance in 1873 is virtually identical to that in the 1890s (1).

We can now conclude that his tumor likely infarcted between 1858 and 1873 instead of the much later date, about 1890. This lends support for the impression that Pico might well have been the biological father of the two boys, Ranulfo Romero born 1862 and Alfredo Romero born 1871 (1). Additional photographic or historical medical data may yet permit further refinement of the natural history of his disease.



This carte de visite photograph of Pio Pico by Valentine Wolfenstein of Los Angeles has a clear provenance. An inscription states the owner (Thornton Sanborn) had been to a champagne dinner at the Pico House hotel in 1873 with Don Pio present. Sanborn was a nephew to F.P.F. Temple who was a close friend of Pio Pico. The image ultimately passed to one of Temple's sons, Walter, after 1926. It then passed to Walter's eldest son, Thomas, an historian and genealogist of early California, and then to Thomas' widow and then on to her second husband whose daughter, Jeanine Raymond, donated the photograph to the Workman and Temple Family Homestead Museum in 2009. In contrast to the 1858 image (1), Pico now shows a generous beard, full eyebrows, symmetrical light reflection on his eyes and less prominence of his acromegalic facial features, all similar to his essentially normal appearance later in his 90's.

- 1. Login, I.S. and Login, J.: Governor Pio Pico, the monster of California...no more: lessons in neuroendocrinology. Open access: Pituitary 13: 80-86, 2010. <a href="http://www.springerlink.com/content/u7645787h2435373/fulltext.pdf">http://www.springerlink.com/content/u7645787h2435373/fulltext.pdf</a>
- 2. Melmed, S.: Acromegaly pathogenesis and treatment. J. Clin. Invest. 119: 3189-3202, 2009.