

## ABOUT THE RIGHT FACIAL PALSY OF CHARLES BELL

### WAS SIR CHARLES BELL HIMSELF REALLY AFFECTED BY FACIAL PARALYSIS? – COMMENT ON ‘PERIPHERAL FACIAL PALSY IN THE PAST. CONTRIBUTIONS FROM AVICENNA, NICOLAUS FRIEDREICH AND CHARLES BELL’

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Dear Editor,

We compliment dr. De Lima Resende and dr. Weber with their interesting article entitled: ‘Peripheral Facial Palsy in the Past. Contributions from Avicenna, Nicolaus Friedreich and Charles Bell’<sup>1</sup>. In it, they state that “*Charles Bell [...] himself had right peripheral facial paralysis*”.

To support their statement the authors refer to a review on the history of facial nerve surgery by Jongkees (1979)<sup>2</sup>, who indeed made the same remark. Jongkees in turn concluded this from a book chapter written by Zülch (1970)<sup>3</sup>, who started the chapter with the following quotation by Sir Charles Bell (1774–1842): “*...When the paralysis was complete, I began to feel pain in the temple, and there was oedematous swelling in the part. During the course of this complaint I have experienced two circumstances which may lead to the detection of the facial nerve becoming affected...*”.

Thereafter Zülch wrote: “*We consider it apt to preface our description of ‘idiopathic’ facial paralysis with this excellent piece of self-observation, quoted by Sir Charles Bell in his well-known publication (1829) of his physiological and pathological research on the nervous system. It was a letter written by Professor Roux of Paris to his colleague Descot, in which he described his own symptoms*”<sup>3</sup>. Thus, Zülch did not mention that Bell was affected by facial paralysis. Instead it seems to have been Roux, whose self-observation was reported by Bell in 1827<sup>4</sup>. Neither Bell’s own work nor the extensive biography on Bell written by Gordon Taylor and Walls (1958)<sup>5</sup> gives us indications that Bell himself was affected by facial paralysis.

Unfortunately, Jongkees seems to have introduced the error that Bell himself was affected by facial paralysis. To prevent perpetuation of reporting historical errors in the literature, a critical and scientific attitude regarding the use of historical data is necessary. We should always beware of secondary literature, and we should always check the primary sources concerned. Already in 1916, Frank Place advised us: “*Take no reference for granted. Verify the reference that your best friend gives you. Verify the reference that your revered chief gives you. Verify most of*

*all, the reference that you yourself found and jotted down. To err is human, to verify is necessary*”<sup>6</sup>.

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#### THE AUTHORS’ REPLY

##### ABOUT THE RIGHT FACIAL PALSY OF CHARLES BELL

Dear Editor,

We acknowledge Korteweg et al. for their interests in our article about peripheral facial palsy<sup>1</sup>. Unfortunately, there are some oversights in their observations.

According to Korteweg et al., our diagnosis of Sir Charles Bell’s right facial palsy is based only on the observations made by Jongkees<sup>2</sup>. This is not correct. In fact, our diagnosis is based on the neurological examination of the photography of Sir Charles Bell (Figure). The au-



Figure. Sir Charles Bell, with probably right peripheral facial paralysis. Observe the absence of wrinkles on the right forehead; the right eyebrow is abnormal and asymmetric; the right palpebral fissure is wider and more pronounced than the left; the left angle of the mouth is depressed; the left nasolabial fold is more shallow and deviated to the left hand side.

thors affirm that Jongkees “introduced the error” that Charles Bell had right facial palsy, influenced by Zülch<sup>3</sup>. We do not agree, it is possible that Jongkees has studied the patient’s photography, similarly to us. Korteweg et al. did not transcribe a complete translation of Jongkees’s text. According to Jongkees<sup>2</sup> Charles Bell described that ... *Wenn die Lähmung vollständig wurde, spürte ich Schmerzen in meiner Schläfe und auch eine oedematöse Schwellung. Während der Dauer der Beschwerden habe ich zwei Dinge erfahren müssen, die zur Entdeckung der Lähmung des Nervus facialis führen könnten. 1. Das Trommelfell war empfindlich, selbst für leise Töne und 2. der Geschmackssinn an meiner rechten Zungenseite war abnormal, so dass alles metallähnlich schmeckte. Dieses letzte Symptom war vor allen anderen Beschwerden da und wurde bereits 24 h vor Beginn der Lähmung gespürt. Der Schmerz war nicht bedeutend, weder im Stamm noch in den einzelnen Nervenästen. Die Empfindlichkeit war nicht verändert, die Lähmung des Musc. occipitofrontalis, des orbicularis palpebrarum und aller Lippenmuskeln auf der rech-*

*ten Seite war vollständig. Ich fühlte mich wie ein Patient mit einer Hemiplegie. Ich konnte die Worte nicht vollendet aussprechen, meine Backen nicht aufblasen, nur auf einer Seite lachen und fühlte mich belästigt beim Essen durch Mangel an Wirkung des Buccinatormuskels, beraubt der Macht, meine Augen zu schliessen usw*<sup>4</sup>. Translating the observation to English, the most relevant symptoms of peripheral facial palsy described by Charles Bell are: oedema of the temporal region, mild pain, hyperacusis, taste alterations, dysarthria, motor deficit of the hemiface, preserving its sensitivity. The mild pain in the clinical picture of the peripheral facial palsy is controversial, but was described by Déjérine<sup>5</sup>. We think that Jongkees’s diagnosis of Bell’s right facial palsy is based on the almost complete clinical description of symptoms of this condition, experimented and reported by Charles Bell, and on the evident clinical signs which analysis is perfectly possible on his photography (Figure).

In summary, according to Jongkees and us, Sir Charles Bell suffered from right facial palsy. This diagnosis is not only based on the clinical history of Charles Bell, but on the neurological examination.

We agree to Korteweg et al that ...” *we should always check the primary sources concerned*”, since this procedure is realized after the complete clinical anamnesis and neurological examination of the patient, as currently practiced by neurologists in South America.

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