Letter to the Editor

Facial Paralysis: Rhazes' Deviation

Dear Editor,

I read with interest the article by Tabatabaei et al.[1] on the brilliant description of facial palsy by the genius Persian physician Razi (Rhazez) (865 – 925 AD). The authors have well discussed a very fascinating, albeit challenging, medical condition. The condition is also a multi-disciplinary disease of interest to different subspecialties, including neurologists, neurosurgeons, plastic surgeons, otolaryngologists, ophthalmologists, and psychiatrists.

The description of facial paralysis by Rhazes is so skillful that it parallels our current knowledge of the disease despite his living about one thousand years ago. The presence of hyposthesia or even hyperalgesia, the predictive nature of sentinel facial pains or facial spasms, the appearance of the eyes, forehead and mouth, and other provided clues all apply even after many centuries. This rather exact description is certainly the product of careful inspection over hundreds of patients harboring the same condition. Inspection is the primary step of physical examination. In the face of sophisticated technology of the modern era, many of us neglect this step as well as perhaps the entire history taking and physical examination in our routine daily practice or research.

There are of course a few points in Razi's description which do not correspond well to Bell's palsy as an idiopathic paralysis of the seventh cranial nerve as stated by the authors. The involvement of the ninth cranial nerve and uvula paralysis, hemiparesis, clouding of consciousness, and death after a few days are never explainable with Bell's palsy. One may think that such discrepancies may be attributable to the primitive nature of medicine as a science in that era. I do not believe so. If we look more closely, the description of the disease corresponds to other conditions that also accompany paresis of the seventh cranial nerve; such as brain tumors, Lyme disease, and most importantly and most commonly, cerebral ischemic or hemorrhagic stroke.[2,3] Facial paresis, hemiparesis, and decreased level of consciousness are all cardinal manifestations of stroke, especially MCA-territory infarction.[4] Involvement of other cranial nerves (i.e., glossopharyngeal nerve) may be seen with cerebral infarction (as a central palsy) or brain stem infarction (as a peripheral palsy).[4] The grave prognosis stated in the original text may also represent a massive hemispheric cerebral infarction, which will be lethal in the first few days after presentation.[4]

Such a deduction again confirms the genius of Rhazes, who has considered other several accompaniments of facial nerve paresis, although not separately. In reappraisal of his great description of facial paresis, we should rename it: "facial paresis as a condition accompanying many diseases", or perhaps "facial deviation as a symptom"; rather than just simply "Bell's facial palsy".

Disclosure: There is nothing to disclose.

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Author's Reply,

Many thanks to Dr. Razmkon for his attention to our article.[1] According to his comments, our explanations are as follows:

Bell›s palsy is defined as an idiopathic unilateral facial nerve paralysis, usually self-limiting. It can occur bilaterally resulting in total facial paralysis in approximately 1% of cases.[2,3] Most people recover spontaneously and achieve near normal to normal functions.[4] Bell›s palsy is characterized by facial drooping on the affected half, often the eye in the affected side cannot be closed. Patients diagnosed with Bell's palsy may have facial tingling, moderate or severe headache/neck pain, memory problems, balance problems, ipsilateral limb paresthesias, ipsilateral limb weakness, and a sense of clumsiness that are unexplained by facial nerve dysfunction.[5] This is yet an enigmatic facet of this condition. Possible causes include tumor, meningitis, stroke, diabetes mellitus, head trauma, and inflammatory diseases of the cranial nerves (sarcoidosis, brucellosis, etc.). In a few cases, bilateral facial palsy has been associated with acute HIV infection.[6] In endemic areas, Lyme disease may be the most common cause of facial palsy. After a follow-up of at least one year or until restoration, complete recovery had occurred in more than two thirds (71%) of all patients. Recovery was judged moderate in 12% and poor in only 4% of patients.[7,8] Ancient Persian and Arabic specialized textbooks (medical, astronomical, and mathematical to name a few) are of a special language which needs special skills to understand their concepts. Accordingly, we say that the definition, symptoms and signs of unilateral and bilateral facial paralysis from Rhazes, are approximately the same from Charles Bell. Although Bell›s palsy, is idiopathic facial paralysis, however, Sir Charles Bell in 1829 presented three cases at the Royal Society of London of which two were idiopathic and the third was due to a tumor of the parotid gland.

In the prognosis of facial paralysis, Rhazes indicated about ten items for differential diagnosis. These are very valuable and notable for clinicians from both Rhazes era and today. Rhazes did not moot them as causes of facial paralysis, so we understand from his statements that in addition to idiopathic facial paralysis, there are probably additional causes for this disorder, with various prognoses. However, for Rhazes who lived 11 centuries ago, this type of diagnosis, judgment and comment is wonderful and admirable.

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Dear Editor,

I read the article by Zendehdel et al. published in the November issue of your journal with much enthusiasm. The authors have spent much time and effort to perform the study and their endeavor is appreciated. However, there are major flaws to this study, which makes their conclusions rather shaky, if not incorrect. The following are my concerns:

1. The numbers of first-degree relatives of patients with gastric cancer included in this study was unclear. How many of these first-degree relatives were invited and how many accepted to participate? According to the authors, 551 patients with gastric cancer were identified and 989 first-degree relatives were enrolled, if so, less than two first-degree relatives per patient have been enrolled. It is conceivable that each gastric cancer patient has more than this number of first-degree relatives eligible to be enrolled. Therefore, it seems a significant group of first-degree relatives have not either been invited or declined to participate. This means that a high probability of important selection bias is present in this study.

2. The authors state that 1,991 gastric cancer patients were registered in Tehran during their study period. The source of this information was not clear.

3. In the first paragraph of the "Results" section, the authors state: "… a total of 989 FDR from 551 families with GC were recruited. Of these 357 FDR were from one GC family and the remaining 632 from 194 families with more than one GC." These sentences are not clear to the reader. If the authors mean that 194 families with two or more cases of closely related gastric cancers were present yielding 632 first-degree relatives to be enrolled in their study, then these figures contrast what is depicted in Table 4.

4. The authors state that if the mean number for antral inflammation was "*higher"* than that of the corpus, then the case was considered as antrum-dominant gastritis and vices versa. What does "*higher"* mean? For instance, if the number for antrum was 2.6 and for corpus 2.5, then the patient was classified as antrum-dominant gastritis? If not, then what degree of difference had to be present for one number to be considered as "*higher"* than the other one? If, on the other hand, any degree of difference could make one number "*higher"* than the other one, can this be considered correct?

5. The inter-observer kappa statistics stated for the pathologists is modest at most. This adds to the weight of "comment number 4" as well as being a source of misclassification and bias.

The authors have not followed a given person over time. In the last paragraph of page 471, they state that "antral and corpus atrophy persists after age 44, while IM progresses from 12.2% to 19.0% in the first decade and from 19% to 27% in the second decade, etc." These sentences are unclear. What do first and second decades refer to? In addition, as mentioned, the authors have not followed any given subject; how can they comment on the progression of the lesions? In the paragraph before the last one on page 473, this has been repeated, with no data to support their claim. The authors at most, can comment on the prevalence of such findings in different age groups.

These are only a few of what makes this article and its conclusions rather shaky and unreliable, in particular if it is going to be generalized to a large population. Therefore, in accordance to what is stated above, the authors' conclusions should be regarded with much care.

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Author's Reply,

In a letter to the editor, my colleague Dr. Nasseri-Moghaddam criticized the method of our study published in AIM from various view points.[1] Here, we reply to his criticisms:

1. He is correct in that a selected sample from all first-degree relatives of all gastric cancer patients residing in Tehran was examined in our study. However, the goal of our study was to elucidate the types of gastritis in this group and not to verify the prevalence of organic diseases. It is clear that those who are aware of being at risk for gastric cancer or have more abdominal symptoms, would have accepted our invitation to be enrolled into this study. Therefore, we would expect to have more organic diseases and more symptomatic patients with non-ulcer dyspepsia in our selected sample than in the eligible, entire population. However, we excluded all subjects with organic diseases from our study. Non-ulcer dyspepsia could be most often encountered in the group that accepted our invitation. However, gastritis and their types have no relation to symptoms of non-ulcer dyspepsia.[2] There are good meta-analyses, which exclude any causal relation of abdominal symptoms with gastritis or even with *H. pylori* infection.[3]

2. In a city of more than 10 million people with different state and private hospitals, and no complete coverage of people by insurance companies where medical data collections are anonymously possible, it would be impossible to have exact and complete information from the entire city. The source of our information about the incidence of gastric cancer was Tehran Cancer Institute (reference

17), where all subjects with gastric cancer were registered over four years. We estimate that this number was most likely similar to a time period four years earlier, during which we enrolled the subjects into our study. According to this report, we have probably examined not all first-degree relatives but almost 20% of all eligible gastric cancer patients.

3. More often we verified only one member as first-degree relative, and there were less relatives with two or more members from one family with gastric cancer. However, among 875 first-degree relatives (Table 4), there were 45 relatives who informed us that they had at least two first-degree relatives with gastric cancer (father and mother, two brothers or sisters, one parent and one sister or one brother). We must concede to have verified objectively only the existence of one member with gastric cancer in the family.

4. The author is correct with his statement. We considered antrum- or corpus-predominant gastritis when mean score of inflammation was more in one part of stomach than the other. We know that this differentiation is artificial and there is no agreement on this classification. However, as there is a progression and worsening of gastritis with aging, although some regression can occur with time for unknown reasons or by administration of antibiotics, we expect the progression of an antrum-predominant gastritis to pangastritis and further to corpus-predominant gastritis with advancing age,[4] when *H. pylori* infection is not eradicated.

5. There is often disagreement between pathologists on evaluation of morphological findings of gastric mucosa, particularly in the evaluation and grade of atrophic gastritis.[5] However, the agreement is higher than 60% in the evaluation of other morphological characteristics by experienced pathologists. We did not report on the change of morphological findings by follow up of our patients, but we reported how advanced atrophy or intestinal metaplasia occurs in those within the age group of 38 – 50 years compared to the groups one or two decades later (51 – 60, and >60 years; see Table 3), as gastritis is not a steady state process but a dynamic one that mostly progresses over time.[4]

6. As we noticed in our publication, the important weakness of our study is the lack of endoscopies in the control population that had no family history of gastric cancer. As endoscopy is considered to be an invasive procedure, ethically the conduction of such a study is not feasible in the general population. We had to include for controls only dyspeptic patients. Among them, some would have taken NSAIDs or have ulcer-like dyspepsia without ulcers as candidates for getting an ulcer, or those who have a special type of gastritis.

The author claims that the results obtained from our study are unreliable when generalized to a large population. My colleague Dr Nasseri-Moghaddam disregards the high number of 864 first-degree relatives of gastric cancer patients without gastric lesions who underwent endoscopies. This considerable number has not been hitherto examined in any study published on gastric cancer relatives in the world literature.

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Oral Cancer in Iran is Poorly Understood

Dear Editor,

I read with keen interest the recently published article entitled "Oral Cancer Knowledge among Patients Referred to Mashhad Dental School, Iran" in your esteemed journal.[1]

The issue of oral cancer is an important one. Worldwide, more than a half million people are estimated to be suffering from oral cancer and with approximately 275000 new cases per annum; it is the 11th most common cancer. Epidemiologic studies revealed a wide range of oral cancer prevalence in different parts of the world; the majority of which confirmed increasing incidence, morbidity and mortality rates in recent years. [2]

A previous report from Iran has shown that almost 60% of patients with oral cancer are diagnosed at stages III and IV.[3] There are conflicting opinions about the factors that may influence the patients' presentation at an advanced stage. To date, the main factor appears to be delay in diagnosis which is dependent on knowledge and awareness of both patients and professionals in detecting the lesions.[4]

In the published article by Pakfetrat et al., disappointing results were achieved regarding patients knowledge of oral cancer.[1] In a recent study (unpublished) in the Iranian Cancer Institute, we observed a wide range of 1 to 104 weeks (with a median of 10 weeks) and 1 to 52 weeks (with a median of 4 weeks) for patient and professional delay, respectively. In addition, undergraduate Iranian dental students' knowledge regarding prevention and detection of oral cancer indicated that increased levels of awareness of relevant risk factors were needed. Moreover, such students were likely to view ulceration as the only early warning sign.[5]

Oral cancer in Iran is not well understood. We need more research to better assess the disease in our country. This paper should provoke us all into thinking more about both the etiology and early diagnosis of oral cancer. As part of our professional responsibility, we should not only keep our knowledge up to date, but also advise our patients about the risk factors and probable early warning signs.

Programs such as the National Oral Cancer Awareness Week (NOCAW) are strongly recommended. In addition, collaboration with non-governmental organizations (NGOs) funded by international organizations with the support of the Ministry of Health to enhance public awareness should help. Oral cancer screening programs may be beneficial for the screening of high-risk groups, especially if they do not regularly visit a dentist. Further studies to evaluate the epidemiological characteristics and risk factors for oral cancer in Iran are needed.

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I wish to thank Professor Graham R. Ogden for his critical review.

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Authors' Reply,

We welcome the comments of Dr. Mahboobi on our article regarding "Oral Cancer Knowledge among Patients Referred to Mashhad Dental School, Iran". As we mentioned in our paper, oral cancer is one of the most common life-threatening diseases which has a high prevalence in Iran.[1] Unfortunately the survival rate of oral cancer has remained low, despite advances made in diagnosis and treatment of malignancies.[2]

Most head and neck cancers are readily visible and oral cancer screenings are inexpensive, safe and noninvasive methods of detection. This screenings may also provide an excellent opportunity for raising public awareness and providing patient education and counseling regarding behavioral risk factors and how to reduce them.[3]

Our survey highlights the general lack of awareness about mouth cancer in our population and necessity of training programs about oral cancer for both the general population and dental practitioners.[4]

The recent American Cancer Society's Guidelines for Early Cancer Detection also emphasize the opportunity of oral cancer detection through the inclusion of oral cancer checkups at general periodic health examinations rather than through a stand-alone oral cancer examination.[5]

The authors believe that in addition to planning for raising public awareness about oral cancer and training of dental practitioners in this field, screening programs in the country should also be performed periodically. Therefore, we are planning to schedule these screening programs in Khorasan Province.

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