Observations on the Dental Examination of Old People over 100 Years

by

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Introductory

Lengthening of a span of life seems to be a universal phenomenon during the past decade, not confined to a particular country in the world. Tokyo University School of Medicine had instituted an elective course in gerontology as long as 30 years ago and the Department of Gerontology was officially started in their Hospital since this August.

However, rapid paces in the medical aspect of old people are not reflected in dentistry to the corresponding extent. As a step toward a gerontological consideration in dentistry, the authors have undertaken a dental examination of old people over 100 years of age.

Survey Method

As a preparatory step, we had applied to the Tokyo Government Bureau of Welfare for necessary information and as a result, it was revealed that there were registered only 8 persons over 100 years alive at the time of the survey and they were all women without a single exception.

To each of these 8 possible subjects we sent a letter of the following content.

Dear Mrs. . . . .

We are the dentists attached to the Dental Hospital, Nihon University School of Dentistry, Kanda, Surugadai, Tokyo, and our interest is being directed to the relationship between an old age and the state of teeth.

Please accept our congratulations at your advanced age which you seem to enjoy in good health. We shall be pleased indeed, if you are good enough to co-operate with us in affording us an opportunity of making an examination of your teeth so as to assist us in obtaining necessary information for the promotion of the level of our gerontological dentistry.

Please be assured that anything which may reveal in the course of our examination and which you would rather not divulged outside will be guarded a strict secret. We like to inform you that we are quite willing to attend to your examination of general health, not only that of dentistry.

Sincerely yours,

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The above letter was sent to the addresses obtained from the Bureau of Welfare in the self-addressed envelope. We were ready to start our examination as soon as a reply was received to our inquiry.

Results

A week after the above letters were sent off, we received a following reply.

No. 1 Mrs. S. K. (100 years old)
Thank you for your kind letter of . . . . We have no doubt that your examination of our grandmother would be quite welcomed not only by her, but also by us. But we regret to inform you that she passed away peacefully on the 14th of November last year.
We hasten to send you our reply to your inquiry. Sincerely yours

Others came in the wake of the first letter.

No. 2 Mrs. S. N. (101 years old)
We fully concur in the execution of a dental examination for the benefit of old people and we consider it an honor that our grandmother had been selected. We are sorry to say, however, that she died in February this year. Please feel free to call on us if there is any other matter we can be of service to you.
Truly yours,

No. 3 Mrs. F. A. (101 years old)
In reply to your letter of inquiry, we regret to inform you that our grandmother died on March 1st this year at an advanced age of 102 years and 3 months. During her lifetime, she had not suffered from any disease worthy of the name but as for her teeth, we remember that she started to wear a full denture plate when she was about forty years of age.
Sincerely yours

No. 4 Mrs. O. F. (100 years old)
We hasten to inform you that our grandmother died in the morning of March 19th this year. We are sorry that we cannot be of any help to you in the matter.
Respectfully yours

No. 5 Mrs. K. K. (101 years old)
We have understood the contents of your recent letter. But as our grandmother is at present confined to bed because of illness, we regret it very much that we are forced to decline your offer of giving her a free dental examination.
Sincerely yours

No. 6 Mrs. Y. S. (100 years old)
This is in reply to your letter of inquiry. We are unable to accede to your request, since our grandmother does not feel like being subjected to such an examination.
Sincerely yours

No. 7 Mrs. M. A. (102 years old)
Our grandmother is quite willing to be examined by your staff as was informed in your letter. She is available at any time in the day from Monday to Friday. We appreciate your care not to divulge any information regarding our grandmother
which may adversely affect her.

No. 8 Mrs. N. T. (103 years old)

Our grandmother welcomes your offer of free dental examination and she wishes to inform you that she will be available at any time on a short notice.

Sincerely yours

As can be known from these letters, half of the original eight subjects had died by the time we got in touch with them and of the remaining four, two persons were unco-operative for one reason or another. We considered ourselves, however, fortunate in securing the co-operation of two women.

Our original plan was to include not only an oral examination, but also various tests on blood, urine, stool, pH value of saliva and blood pressure inclusive of the cardio-electrography. But changes had to be made in the plan as we feared that some of these tests might prove in any was harmful to their health at so advanced age. Therefore, we finally decided on the indirect and oral examinations alone.

Findings

We have obtained the following data on the two subjects as the results of our examinations.

Case 1 (No. 7, Mrs. M. A., aged 102)

She was born in Shikoku Island on April 27th in 1861 and when she was about 45 years of age, she accompanied her husband to Manchuria where they had lived about 30 years. After their return to Japan, she has been living in Nerima, Tokyo, during past 5 or 6 years. She has not suffered from a disease worthy of the name but this July she was confined to bed because of a slight cold and she had an injection of vitamin B effected. This seems to be the only occasion when she had the need of a doctor. She never drinks alcoholic beverages nor smokes. By way of food preferences she prefers foods of oily kind, especially the Chinese dishes. She is very hard of hearing and one had to speak to her at the top of one's voice. Her maximum blood pressure is at 130mm Hg. As for her oral conditions, she had lost all of her teeth around 85 and since then she has been wearing a full denture plate. Our examination of the plate revealed it to be rather unsatisfactory in fitting but the wearer was quite content with it as it enabled her to masticate food.

Case 2 (Mrs. N. T., aged 103)

Born in Kisarazu, Chiba, on April 11, 1859, she had lived in her native town till she was about 50 and then she came to live at the present address in Tokyo. Since her childhood up to recent years, she had enjoyed a very good health and past a few years she began to complain of occasional rheumatism. She never touches alcohol nor drinks. Though she admits that her daily life is by no means regular, yet she tries to sleep at least 8 hours a day. Her favorite foods include raw fish, radish, egg-plant and cucumber and she does not like beans and sweets. Her eldest daughter who is 71 years old is in robust health and the second son died at the age of 71 some years ago. Though hard of hearing, she retains a good eye-sight and she can thread needles for her sew-works. She maintained both upper and lower anterior teeth till 2 years ago (101 years old) and since she lives in the edentulous state.
As she does not feel much inconvenience in masticating food with her gums, she has not been to a dentist for any dental work.

**Considerations**

One thing which became quite clear in our examinations described above is that in this kind of survey where the passage of time is critical we should try not to lose any time unnecessarily in making contacts. We should call on our subjects as soon as we find out about them.

It is a risky task to draw any generalizations from our findings of merely two cases but the following points may be given as fair statements.

1. All of those who pass the age of 100 are females.
2. Natural teeth seem to lose themselves within the range of 85 to 101 years when there are no other pathological reasons. When teeth are lost around this age, the toothless people may be able to live on without any prosthetic work.
3. Those who have not suffered from any illness up to 100 seem to stand a good chance of living beyond 100.

In view of the present tendency that many people place a blind trust on various tonics and vitamin pills, it is very significant that those two women have managed without any aid of these drugs. At this reflection we find an irony at work that advances in modern pharmacology seem to run counter to the normal enjoyment of a long life.

**References**