

THE INCIDENCE OF GASTRO-INTESTINAL DISORDERS IN EDENTULOUS INMATES IN A WORK COLONY

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Very little is known concerning the incidence of gastro-intestinal disorders in edentulous persons, though it is generally believed by medical and dental practitioners that an edentulous state will predispose to such disorders. In order to ascertain to what extent these views can be substantiated a number of edentulous male inmates in the Sonderwater Work Colony were examined during the period from 1951 to 1956.

Materials and Methods

The Sonderwater Work Colony of the Union Social Welfare Department is an institution to which men are committed for the following offences, viz. (1) failure to support their families, (2) drunkenness, (3) illicit liquor-selling, (4) dagga smoking and selling, and (5) minor criminal offences. The main object of this institution is to endeavour to rehabilitate these convicted men. Upon admission they are medically examined not only to determine for what kind of work they will be fit, but also to treat them for any disease or disability from which they may be suffering. Their mouths are examined to determine what dental treatment should be given.

Many of the men are edentulous when they are committed and details about their edentulous state are taken. They give various explanations of how they came to lose their dentures. Some say they have never worn dentures and did not want them. The majority admitted that they lost them through drunkenness. The others said they lost them in fights, in accidents or while bathing in the sea or a river. A few confessed that they pawned them, usually in order to buy liquor.

These edentulous inmates were kept under observation to ascertain whether they suffered from any gastro-intestinal disorders. Those who complained that they could not masticate their food properly, and that they were suffering from gastro-intestinal pains after meals, were given minced meat, scrambled eggs instead of boiled or fried eggs, mashed potatoes, grated carrots, etc. Fresh milk was given instead of tea or coffee. Medicinal treatment consisted of magnesium trisilicate, amphogel benthene or bellergal tablets, injections of B 12 with vitamin-B complex and ascorbic-acid tablets. If after 3 or 4 months it was found that any of them did not respond to this treatment, were losing weight and persisted in complaining about gastro-intestinal pains, and if they showed promise of rehabilitation, they were provided with dentures at the State's expense. They then had to report daily concerning their complaints to ascertain if the fitting of dentures had cured them. It is a rule of the institution that, once an inmate has been fitted with dentures, he will not be provided with a second set of dentures if he is recommitted in an edentulous state. It has been ascertained that the majority of those who are recommitted in an edentulous

state having previously been provided with dentures cannot be rehabilitated and lose their dentures again through drunkenness or pawn them to buy liquor.

RESULTS

Of the 161 edentulous inmates of various ages who were committed to the Sonderwater Work Colony during the period 1951 to 1956, 128 did not suffer from any gastro-intestinal disorders. The time they had been edentulous varied from 2 to 20 years. The remaining 33 complained of abdominal pains after meals, but their gastro-intestinal condition was not investigated radiologically. These latter inmates were fitted with dentures, and an apparent recovery was usually observed, since they did not complain subsequently. It was found to be cheaper to fit an inmate with dentures than to convey him with escort to the hospital 28 miles away for a radiological examination for a suspected or alleged gastro-intestinal disorder.

Table I gives the number of edentulous inmates

TABLE I. EDENTULOUS INMATES NOT SUFFERING FROM GASTRO-INTESTINAL DISORDER

Age-groups	2-4 years	5-7 years	8-10 years	11-13 years	14 years and over	Total
25-29 ..	3	3				6
30-34 ..	7	4	1	1		13
35-39 ..	12	4	3	3	1	23
40-44 ..	11	1	4		2	18
45-49 ..	13	4	4	2	4	27
50-54 ..	10	7	1	3	1	22
55-59 ..	7	1		1	1	10
60-64 ..	3		1	1		5
65-69 ..	1		1	1		3
70 and over			1			1
Total ..	67	24	16	12	9	128
% ..	52.3	18.7	12.5	9.4	7.0	

Table II gives the number of edentulous inmates who alleged that they were suffering from gastro-intestinal disorders, classified in the same manner.

TABLE II. EDENTULOUS INMATES SUFFERING FROM GASTRO-INTESTINAL DISORDER

Age-groups	2-4 years	5-7 years	8-10 years	11-13 years	14 years and over	Total
25-29 ..	2					2
30-34 ..	1	1				2
35-39 ..	7					7
40-44 ..	4	1				5
45-49 ..	6	2	1		1	10
50-54 ..	2					2
55-59 ..	2		1			3
60-64 ..	1		1			2
65-69 ..						
70 and over						
Total ..	25	4	3		1	35
% ..	75.8	12.1	9.1		3.0	

who were not suffering from any gastro-intestinal disorders, classified by age and according to the number of years they had been edentulous.

Of the 33 edentulous inmates who complained of gastro-intestinal pains 26 were admitted for drunkenness.

DISCUSSION

In view of the small number of persons involved and as the evidence of gastro-intestinal disorders was purely subjective it is not possible to draw any very definite conclusions from these observations. However only 20% of the edentulous inmates complained of gastro-intestinal disorders. The majority of the edentulous men had only been in that state for 2-4 years and might have developed these disorders later had they not been provided with dentures. A large number however had been edentulous for more than 5 years and probably would never have developed such disorders as a result of being edentulous. It is noteworthy that of the men who complained of gastro-intestinal disorders 76% fell in the 2-4 years edentulous group, whereas of those who did not complain only 52% fell in that group. Nearly all the edentulous inmates, especially those who showed promise of rehabilitation, were provided with dentures with a view to preventing the development of gastro-intestinal troubles. Some did not want them, saying they could get on better without them.

It was difficult to assess the actual number of genuine

cases among those complaining of gastro-intestinal disorders. The diagnosis was never confirmed radiologically and it could not be established whether the fitting of dentures or the total abstention from alcohol cured the alleged complaint. A number of the edentulous inmates persisted in complaining of abdominal pains after meals and it was suspected that, at least in some cases, this was in order to be fitted with dentures at the expense of the State.

SUMMARY

1. 162 male edentulous inmates in a work colony, whose ages varied from 25 to 70 years, were examined for gastro-intestinal disorders.
2. The time they had been edentulous varied from 2 to 20 years.
3. 128 did not suffer from any gastro-intestinal disorders.
4. 33 complained of gastro-intestinal pains, especially after meals. Treatment was prescribed by the District Surgeon, and they were all fitted with dentures. All except one were apparently cured. Of the 33, 26 were committed to the work colony for drunkenness.

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