Mr. Gl-n: "Did you ever experience this Mrs. -rch-r woman—what was she like?"

Mr. Ch--n-- at Council Meeting: "Going back to Miss Y--ng, I have another idea."

Mr. Br-ggs to a woman patient of about forty: "Of course you will be inclined to strip."

Mr. H-w--: "Who is this fellow G-tt-ngs?"

Mr. Tr-nd: "I've just got my first negative report."
Mrs. D-g-n: "Is that good?"
Mr. Tr-nd: "It depends how much you like being sterile."

Miss Bl--r to Mr. Gl-n: "Come and stay the night—my mother isn't coming home after all."

From the minutes of the Charities Sub-Committee: "Messrs. F-rn-ss and R-ch reported the results of contact with the Hospital Almoner, Miss Wh-pp."

Mrs. D-g-n: "I shall be in the magazine anyway, as I'm being certified!"

Miss G-nst-n-: "Death is the last thing in this world, I think about."

Miss C-tt-ll: "We have forty new anatomies!"

Mr. F-rn-ss at Council Meeting: "You can fiddle figures around no end!"

Mr. Wym-n to Mr. P-rr-s: "Janet would like to see you in the corner."

Mrs. D-g-n: "I don't seem to get to know people."
Mr. Wym-n: "You need more social intercourse."

Mr. -v-r-tt: "You say this man lost his teeth whilst serving in the Navy?"
Mr. H-yl-: "Yes sir!"
Mr. -v-r-tt: "Was he commissioned?"
Mr. H-yl-: "No sir."
Mr. -v-r-tt: "Don't put it down, you can't believe everything these non-coms. tell you."

Mr. W-lt-rs after a long discourse on the fracturing of metals: "This means that the bigger the crack the more chance of fracture."

Mr. -nd-rs-n: "Miss Br-ml-y and I are going down to Brighton for the week-end and will give a report on our student goings-on."

Nervous patient in surgical department: "I would much rather have a baby anyday than have a tooth out."
Mr. R-y: "Well, madam, if you will hurry up and make your mind up we will adjust the chair accordingly."

Mr. -ng- in tails, topper and opera cloak on Nov. 6th to taxi-driver: "Ciro's!".
Taxi-driver: "Wot, that place opened up again, guv?"

Tooth Erosion in a Boy Consuming a High Intake of Cola and Similar Drinks

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Introduction

EROSION is the loss of tooth substance at its surface due to soluton in acid.

The erosive action of fruit juices having a pH less than 3.5 has been discussed by Holloway, Mellanby and Stewart (1958). They investigated the action of these on the teeth of hamsters, rats and dogs in vivo, and of human beings *in vitro*.

James and Parfitt (1953) discussed the potency of concentrated acid substances in certain medicaments on the teeth of children.

In their summary Holloway et alia found that human teeth in vitro were eroded by certain drinks of lower pH than mentioned above. Their investigations did not include observations on human teeth in vivo. The following case report indicates that a similar effect may be seen in the mouth. In this patient caries was superimposed on the decalcification. Holloway and his colleagues did not mention the development of caries in their report, but that particular series of investigations may well have been carried out on strains of "germ-free" animals. Orland and his co-workers (1954)

showed that bacteria as well as carbohydrates must be present for caries to occur.

Case History

A male child aged eight years was referred to the Children's Department of the Royal Dental Hospital for treatment of gross decalcification and decay of some of his teeth. Some were extremely painful when eating and drinking, brushing, and even breathing through his mouth. This latter caused him to almost continually hold his lips together. The boy's father indicated that this was upsetting the boy psychologically as well as physically. He was even fearful of smiling at people in case a draught of air reached the teeth.

He also exhibits a unilateral facial muscle weakness. This is apparent when he grins, his mouth being pulled to one side.

On examination of the mouth much materia alba was found to be present. The health of his gingival tissues was good upper CDE and lower E/DE were grossly decayed with an abcess on lower right E. Lower 21/12 exhibited erosion and caries of their coronal portions. Upper 21/12 were completely unaffected. A radiograph is shown in figure 1. The areas of translucency correspond to decalcification seen clinically. There was no evidence of congenital malformation of the teeth.

The boy's diet was very carefully investigated. He did not eat excessive quantities of sweets nor other forms of refined carbohydrates. Iced lollies were seldom eaten. However he had a passion for soft drinks. He drank a bottle of cola each day through a drinking straw, the fluid being directed against the labial surfaces of the lower incisors. In addition a glass of orange juice was taken each day, plus a glass of lemonade each night prior to cleaning his teeth and going to bed. No drinks of a blackcurrant nature were consumed.

These drinks appear to have been the causative factor of his erosion. However it may well be that they have acted upon teeth prone to attack due to an inherent lack of resistance to such fluids.

The following treatment plan was proposed :

1. Extraction of remaining deciduous molars under a general anaesthetic.
2. Elimination of decay from lower 21/12.
3. Temporary protection of the latter against painful stimuli and further decay.

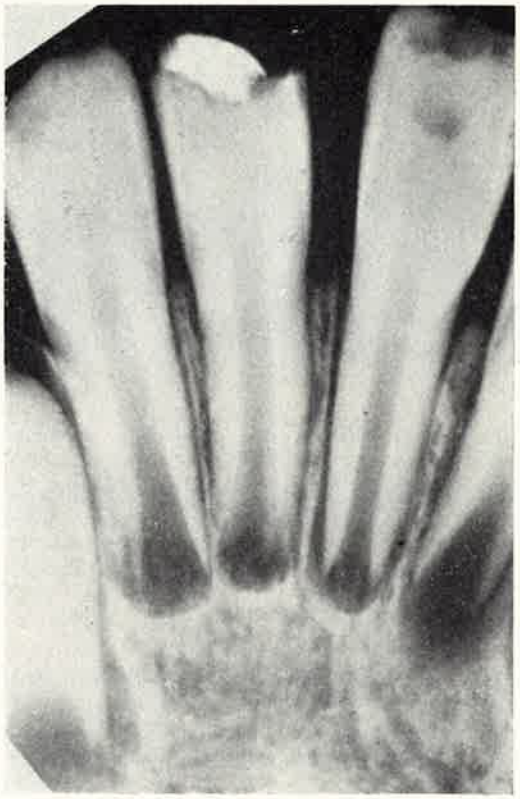

Fig. 1.

This radiograph shows areas of increased radiolucency in parts of the crowns of the lower incisors. These correspond to clinical areas of decalcification. The lower right central is affected more than others. The white area shown on its incisal edge is zinc oxide, this having been used by the boy's general practitioner to temporarily protect the tooth.

4. Instruction in oral hygiene including cessation of cola and similar drinks.
5. Eventually construction of more permanent coronal restorations.

Technique used to treat the lower anterior teeth

A local anaesthetic was infiltrated and decay removed from the lower right 21. The remaining contacts were disced off and protective crowns placed, as shown in figure 2. Nothing more was done at this visit as the child was very apprehensive, although not in pain.

Pre-formed metal crowns of the correct size were chosen. These were trimmed so that the

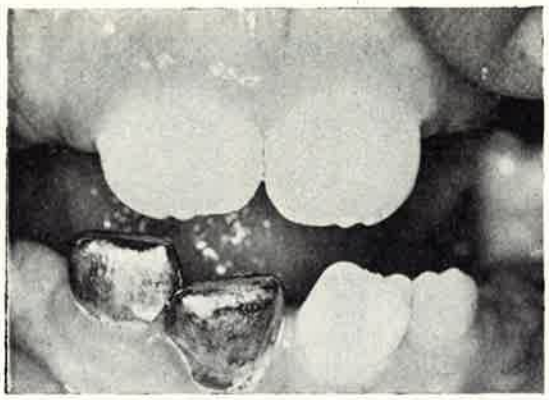

Fig. 2.

The upper centrals are completely unaffected clinically. Upper laterals have not yet erupted into the oral cavity.
Lower right incisors have been capped with metal crowns. Lower left incisors have yet to be treated. Decalcification can be seen to have taken place on the labial and incisal aspects of the lower left central. None of the teeth in question have fully erupted into the arch.

edges lay in the relatively caries-immune gingival troughs around the teeth being treated. They were placed in position and cemented with a quick setting zinc oxide and eugenol mixture.

Such crowns protect the broken down portions of the teeth in question. They act as a barrier to pulpal stimulation by hot and cold foods, and by air. In addition they prevent the spread and recurrence of decay.

The patient returned for his next visit smiling and waiting for treatment to be completed. The boy reported a marked improvement. His lower left 12 were similarly treated When seen two and then eight weeks later the patient was much happier and seemed more self-assured. His father was very pleased with the improvement and said that the boy was eating well with his "new teeth". Even putting a fork into his mouth caused no trouble at all The possibility of some electrolytic action between two dissimilar metals had given us some cause for concern.

When sufficient time has elapsed for secondary dentine to be laid down a more permanent restoration will be placed on each of the affected teeth. This will take the form of shoulderless acrylic or gold basket crown. The latter has been advocated as a semi-permanent restoration by Holloway (1954). Less gingival damage tends to be caused by the thin layer of gold than by acrylic.

Study models have been taken to keep a check on his occlusion. Owing to the muscle weakness he might possibly develop a unilateral malocclusion.

Summary

1. Some of the literature relating fruit and and similar drinks with tooth erosion has been reviewed.
2. A case has been presented in which a boy aged eight exhibited gross erosion and decay of lower 21/12.
3. His condition is correlated with a large daily intake of fruit squashes and aerated drinks.
4. The treatment of this case is outlined.

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THE ARMY DENTAL SERVICE

IT may be claimed that the foundations of Army dentistry were laid in the very cornerstone of the structure of the Army itself. Charles I, who was the first monarch to institute an Army as a regular force, ordained that a free issue of surgical instruments should be made available to the surgeons he was trying to induce to accompany the expeditionary force he raised against the French. Included in the issue were instruments of dental origin. From their shape and size it can be deduced that scaling and treatment