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Title: THERAPY OF CHRONIC CONSTIPATION IN A YOUNG CHILD ^{BY} REARRANGING
SOCIAL CONTINGENCIES

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Presented at: no formal presentation

Submitted to: Behavior Research and Therapy

Running Head: Social Contingencies and Constipation

Prepublication Code: SCC

22 February 1968

**THERAPY OF CHRONIC CONSTIPATION IN A YOUNG CHILD
BY REARRANGING SOCIAL CONTINGENCIES**

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ABSTRACT

Two weeks of caressing a three-year-old boy immediately after rather than before his bowel movements permanently cured chronic constipation, which had lasted almost his entire life and had resisted all treatment except temporary relief by suppositories.

HISTORY

The patient was a three year old boy, one of the two sons of east Indian parents. The father was a professor in a Canadian university and the mother a house wife.

A few days after his birth he developed severe diarrhea which resulted in hospitalization and nearly three months of medical treatment. After diarrhea was alleviated, he developed constipation during the next three years and rarely passed a stool without a drug. During that time the patient visited the pediatrician regularly, underwent medical diagnosis several times, and received frequent pharmacological treatments.

DIAGNOSIS

At the time the boy was brought to our attention, his parents were following an elaborate daily routine in their attempt to produce stool elimination. The child was placed on the toilet seat for one or two hours. Mother and sometimes both parents pleaded with him to pass stools and "entertained" him during this period. If he tried to leave the seat or cried, more "affection" was emitted to "soothe him". At the end of this ritual the child was tired and was put to bed with various acts of "affection." Often the mother would lie down on the bed with the boy until he fell asleep.

A medicated suppository was administered once a week, one half to two hours before placing the boy on the toilet seat. Invariably he defecated

on the day of medication, but never without it. Occasionally defecation also took place on the following day.

The above history suggested to us that the social consequences presented to the boy by the parents for sitting on the toilet were maintaining his constipation. We therefore decided to withdraw the social events which were usually paired with sitting on the toilet, and present them as consequences for stool elimination. In order to further expedite the therapy, additional events which may accelerate the stool elimination were also sought. According to the mother, the boy liked to play in the bathtub. Therefore, playing in tub was made contingent upon his stool elimination and programmed immediately after each bowel movement.

BEHAVIORAL MODIFICATION

In addition to the history given by the mother, a 13 days' record of on-going toilet habits was obtained before introducing the behavioral modification program. During this phase the mother placed the boy on the toilet every day, and pleaded with him to pass stools for nearly two hours. At the end of this period the child was often found crying. The mother hugged the child until he calmed down and then put him to bed. The medicated suppository was administered twice during this period to elicit defecation. The data graphed in Figure 1 show that the stool elimination resulted only after the medication in this phase. Ten days in which no suppository was administered did not produce any defecation. The first suppository produced a bowel movement

on the day of administration and also on the following day. The second suppository produced three bowel movements on the same day.

INSERT FIGURE 1 ABOUT HERE

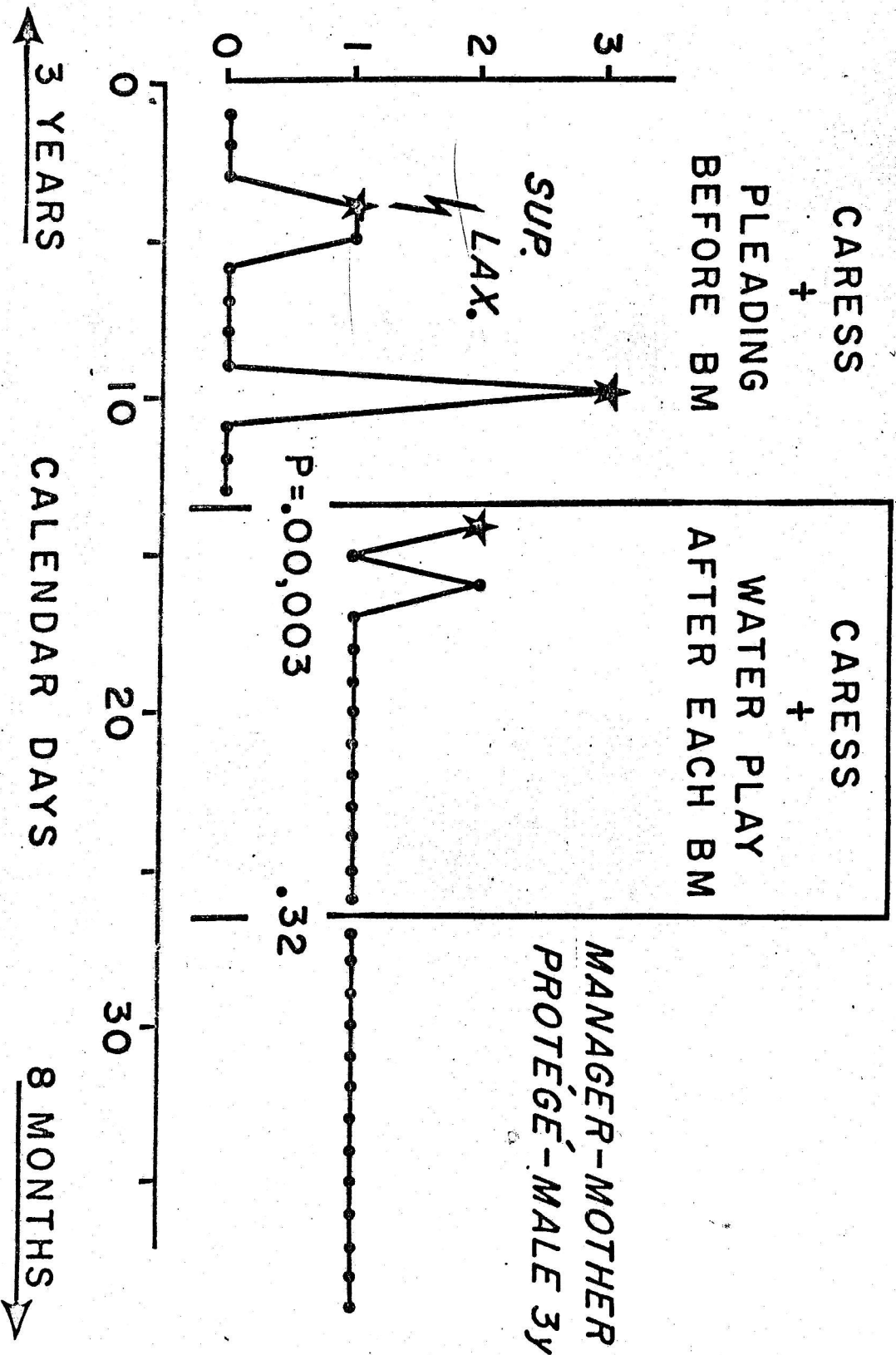
During the behavioral modification phase, the mother placed the child on the toilet seat, which was located next to a bathtub. The tub was filled with water and a few toys were placed in the tub. She told him that as soon as he had passed stools, he could call her and that she would place him in the tub for as long as he wanted. She then left the room and closed the doors. When the boy called his mother, she would come in and go directly to look into the toilet. If feces were found, she smiled, hugged and kissed the child, praised him for his response, and placed him in the tub. (If feces were not found, the mother had been told to immediately leave the bathroom - but surprisingly this never happened!)

The modification phase was initiated by eliciting the first bowel movement with the medicated suppository prescribed by his physician. The presentation of social consequences followed immediately after the elicited bowel movement. The boy acquired the elimination response instantaneously, and after the first modification session did not ever require another suppository (Fig. 1). The possibility of this change in bowel movement rate occurring by chance is three in one hundred thousand times (Fisher's exact formula applied to the

Figure 1

Permanent acceleration of bowel movements of a three-year-old boy, from none without a suppository laxative (chronic constipation) to one per day, by two weeks of caressing the boy immediately after each movement rather than before.

BOWEL MOVEMENTS PER DAY



Mid-median test). According to his mother, who administered the behavioral modification, he began to ask for the toilet seat himself during the later part of this phase. Time spent on the toilet seat was not reinforcing by itself, since it was reduced gradually from nearly 2 hours in the beginning to a mere 15 minutes (approximately) in the end.

During the final, post-treatment phase, the mother placed him on the toilet whenever he asked for it and gave him a bath daily, but not necessarily after his defecation. The boy, however, was helped from the toilet seat by his mother as he was unable to get down himself. After 14 days of the post-treatment recording, the boy returned to his home in Canada. The last communication from his parents, nearly eight months after treatment, reported the child to be regular in his toilet habits and free from constipation. The toilet routine appeared to be maintained by its natural consequences. The transfer from the programmed social consequences to the natural home conditions occurred without any response decrement.

DISCUSSION

The social consequences which apparently maintained toilet sitting and constipation so successfully for nearly three years were equally powerful in generating bowel movements when the contingencies of their presentation were rearranged. Making the parental caresses contingent upon bowel movements rather than toilet sitting, successfully accelerated bowel movements and at the same time decreased the duration of toilet sitting.

This case history provides still another example of maladaptive child behavior being maintained by social consequences unwittingly presented by the parents. Our case report also provides another instance in which a symptom, traditionally thought to be a disease requiring medical attention (but resisting all traditional medical treatment!), was actually a learned response and was immediately responsive to behavior therapy by merely rearranging social contingencies.

As the number of these cases steadily mounts, it is criminal malpractice to deny your patient Behavior Therapy—most especially since it is so rapid, so inexpensive, and has no demonstrable counter-indications or deleterious side-effects.

FOOTNOTES

- ¹ Present Address: Department of Pharmacology, University of Rhode Island,
Kingston, R. I.
- ² Also: School of Education and Bureau of Child Research, University of Kansas.
- ³ The authors wish to thank Wayne Sailor for presenting the initial instructions
to the mother, who found it hard to believe the senior author's
earlier remedial suggestions. Visiting Wayne in his "expert's
office" possibly added status — and certainly a second source —
to these "ridiculously simple therapeutic suggestions which
couldn't possibly work." But, of course, they did.
- ⁴ This study was supported in part by a grant (NB-05362-06) from the National
Institute of Neurological Diseases and Blindness, U. S. Public
Health Service.