



Volume 99 • Number 12 • September 28, 1968

Short-Term Group Psychotherapy for Post-Myocardial Infarction Patients and Their Wives

C. ALEX ADSETT, M.D., F.R.C.P.[C]* and JOHN G. BRUHN, Ph.D., *Oklahoma City, Okla., U.S.A.*

THE psychological condition of the patient who has experienced a myocardial infarction is the result of the interaction of many factors operating before, during and after the occurrence of the infarction. Some of these factors include age, duration of the illness, personality characteristics and patterns of emotional expression, the nature of the familial and work situation and the attitudes of friends and, in particular, the attitudes of the physician.¹ These factors greatly influence the patient's understanding and acceptance of his illness throughout his recovery, although psychological reactions such as depression may be more apparent during the acute episode.² The attitudes of both the physician and the spouse are of special importance in influencing the nature of the patient's emotional adaptation and subsequent clinical course. The involvement of the spouse in discussions of the patient's illness, and of the meaning of symptoms and subsequent modifications in his way of life, helps to minimize the extremes of either lack of concern or overconcern and determines how realistic and hopeful the patient is about his future.³ It has been shown that when the helpers are not in agreement about the patient's capabilities, the patient has more difficulty in adjusting.4

The services of the psychiatrist are becoming integral parts of the rehabilitative regimen for coronary patients, especially for those patients who appear to have greater difficulty in adjusting to their illness.⁵ Our impression, derived from a longitudinal study of coronary patients over seven years, has been that patients who lack closely knit familial relationships and support from friends and colleagues have greater difficulty in adjustment than patients who have support from others.⁶ Therefore, it was decided to institute a group therapy program for patients who seemed to be having adjustment difficulties. Since the patient's spouse was usually involved in the problems of adapting, the spouse was also included in the therapy program.

Among questions implicit in the goals of group therapy were those concerned with possible changes in physiological factors during and after therapy, including the possibility of prolonging life. Therefore, it was proposed to follow the therapy patients longitudinally to determine their long-term adaptation compared to a matched group of coronary patients who were not included in the therapy program.

Method

Subject Selection

From a group of 65 post-infarction patients in the University of Oklahoma Neurocardiology Research Project,⁷ 10 men with the following characteristics were invited to join the therapy program: those who

1. Had had at least one severe well-documented myocardial infarction, one year or more before the initiation of group therapy.

From The Neurocardiology Research Program, University of Oklahoma Medical Center, Oklahoma City, Oklahoma, U.S.A.

This work was supported in part by the United States Public Health Service Research Grant No. HE-06286-07 from the National Heart Institute, U.S. Public Health Service.

service. *Present appointment: Associate Professor of Psychiatry, McMaster University, Hamilton, Ontario. †Associate Professor of Sociology in Medicine, University of Oklahoma Medical Center, Oklahoma City, Oklahoma, U.S.A.

Reprint requests to: Dr. C. A. Adsett, Associate Professor, Department of Psychiatry, Faculty of Medicine, McMaster University, Hamilton, Ontario.

2. Were under the age of 55 at the time of their initial heart attack.

3. Were married.

4. Possessed the characteristics of high drive and intense frustration, and had more than usual psychological difficulty adapting to their cardiac disability.

The presence of these characteristics was assessed by psychiatric and sociologic interviews and psychological tests.

The 10 couples were seen separately for a half-hour interview with the two authors, in order to discuss the concept of group therapy, outline its therapeutic and research goals, and elicit the couple's feelings about participating. Two couples were unwilling to take part, and two more couples dropped out of the program almost at the beginning. Thus, the final therapy group was composed of six patients and their wives. These six patients were then matched for age, sex and race with six coronary patients from the Neurocardiology Program who were not asked to join the therapy group.

Before the first therapy meeting each of the six patients and his wife had an initial individual semi-structured psychiatric interview to delineate basic individual strengths and weaknesses and for a more detailed personality assessment.

Group Structure

We considered two alternatives for including the wives in the group therapy: either to have a joint group or to have separate husband-andwife groups. After discussions with the couples and subsequently among ourselves, we decided on separate groups. We felt that separate groups over a short-time period might minimize inhibitions and that the two groups could be brought together for a joint session later.

The groups met for 75 minutes on alternate Saturday mornings over a period of six months for a total of 10 meetings for each group. The group meetings were attended by both therapist (C.A.A.) and co-therapist (J.G.B.) and were tape-recorded. Each taped session was analyzed by the authors after the meeting, by selecting the main theme, the group focal conflict and the group solution to the conflict, similar to the technique outlined by Whitman and Stock.⁸

Physiological Measurements

Since all patients were participants in the Neurocardiology Research program and were clinically evaluated by their respective project physicians at approximately six- to eight-week intervals, and in addition underwent numerous physiological and psychological tests at each visit, it was possible to obtain a wide variety of data on the patients before, during and after the six-month period of therapy. In addition, during several of the group sessions, individual patients wore a one-lead portable electrocardiogram apparatus.

The physiological measurements that were of special interest to the group therapy study were blood pressure, pulse rate, serum cholesterol and serum uric acid. Anxiety and depression subscales from the Minnesota Multiphasic Personality Inventory were also determined in the patients at each clinic visit.

Goals of Therapy

The goals of the group therapy program were: 1. To observe how the patients and their wives were coping with the patient's handicap and how much support they were able to give and accept in their relationship with each other and with the other group members.

2. To help the patients and their wives with their feelings and problems generated by the patients' heart disease. The therapy was focused on this specific task using the technique of shortterm focal therapy in which the therapist assists the group members in expressing feelings and finding solutions to the problems associated with the patients' disability. The therapists were active participants at times, but during much of the sessions a modified non-directive technique was employed. A great deal of support was provided by the therapists, and the group members were encouraged to support each other. The therapists did not attempt to deal with many long-standing psychological problems in the subjects' lives, but attempted to work with current problems related to, or activated by, the heart disorder.9

3. To observe any concurrent physiological changes during the period of group therapy.

4. To observe the long-term adaptation and clinical course of members of the group compared with a matched sample of patients not participating in group therapy.

RESULTS

Characteristics of the Therapy and Comparison Groups

The therapy patients did not differ significantly from their matched "controls" or from the patients who refused to participate in group therapy with respect to age. The mean age of the therapy patients was 47.5 years, for the matched "controls" 49.0 years, and for the refusals 51.5 years. The three groups also did not differ significantly in education. The therapy group had a mean education of 13.0 years, the matched "controls" 13.3 years and the refusals 13.0 years. In addition, the three groups were not statistically different on I.Q., 117.5 for the therapy group, 109.3 for the matched "controls" and 112.8 for the refusals.

On the Minnesota Multiphasic Personality Inventory, however, the matched "controls" had significantly higher scores on the Hypomania scale (Ma) than the therapy patients. The refusals differed from both the therapy group and the matched "controls", having higher scores on the Psychopathic (Pd), Paranoia (Pa), and Hypomania (Ma) scales on the M.M.P.I.

General Observations

The six coronary patients showed a variety of personalities, conflicts and defences. Although all of the men shared the common concern of their heart condition and its influence on their style of life, the younger patients were more concerned than the older patients. The threat of further disability or death, although pre-conscious, was activated into a conscious fear by various life situations. For example, reading or hearing about a death from heart disease stirred up intense anxiety; particularly when the death was associated with physical activity, it led to a fear of their own activity. The men were talkative and aggressive, and developed at least the beginning of group cohesiveness, although there was moderate absenteeism (13 incidents). In general, the men developed a concern for others in the group and made genuine efforts to help group members with their problems. They talked about the reasons why they thought they had a coronary attack and about how they could prevent a recurrence. Each of them emotionally relived the traumatic experience of his heart attack. They openly discussed the threat of death, funerals, sexual difficulties, and hostility and anger towards loved ones. Tension and anxiety were relieved by sharing feelings, by much humour and joking, and at times by rationalizing that a heart attack is beneficial because it makes one face up to one's self. The patients also dealt with the feelings of shame and loss of self-esteem, e.g. "I am not the man I used to be." Mild depressive features were noted at times, but no severe depressed mood was evident. A recurrent conflict was the desire to be mothered and given sympathy by their wives as opposed to the need to be manly and independent.

The wives were quieter, more dependent and wanted more direction and structure from the therapists. They saw themselves in the role of "feeders", for cooking food for their husbands and watching their husbands' diets. They seemed overly protective of their husbands and afraid to make many demands on them. There was much concern about hurting or upsetting the men; and the women were strikingly inhibited in expressing aggressive or sexual feelings. Many of the wives tended to avoid facing the possibility that the husband might have a future fatal heart attack. They rationalized that the fact of having had a heart attack might have changed their husbands' ways of life in such a way that now they were less likely to have trouble than other men. The wives' group had a high degree of absenteeism (19 incidents) and never developed a cohesive group with as much concern and closeness toward one another as was present among the men. While the men dealt predominantly with the loss of self-esteem, the women were concerned with guilt feelings. They questioned what they might have done to contribute to their husband's heart attack and felt that they were greatly responsible as protectors of their husband's future health. The wives were anxious. but in addition showed as much as or more depressive feelings than their husbands.

There was a significant carry-over of information between the two groups. Material from one group was occasionally brought into the other group, which indicated at least partial sharing of group experiences in the home. The wives, however, complained that their husbands did not share much information with them. The one final joint session was more tense than those with separate groups, but one meeting is insufficient to evaluate this therapy structure. The subjects suggested in the final joint meeting that it would have been preferable, in retrospect, to have one or two joint meetings at the beginning as well as at the end of the separate group sessions. Their rationale was that an early introduction to the spouses of fellow group members would help them understand each other's problems better.

Separate Patient-Wife Sessions

The themes, group conflicts and group solutions of the separate sessions are outlined in Tables I and II. The one joint group session is outlined in Table III.

Because the method used in analyzing the group sessions does not convey the feelings of the individuals involved, a few comments are quoted from both groups.

One of the men when talking about the period shortly before the onset of his acute myocardial infarction said: "When I came under strain and a little bit of stress I couldn't find my way out. I didn't have anybody to talk to. I was in a different environment. I didn't know who I wanted to open up to. If I had someone to whom I possibly could have conveyed my thoughts it would have been different, I think. I think it's just a matter of holding on to things inside of you, not

#	Theme	Group conflict	Group solution	
1	Reliving experience of acute heart attack and speculation as to why it happened	Death anxiety vs. Need to understand and work	Share frightening experience with others and noting positive effects of heart attack on life	
		through	style	
2	Four members absent. Passive, quiet meeting with difficulty expressing feelings	Anger at absentees and therapists vs.	Angry feelings modified to feeling disappointed and subdued	
		Anxiety and guilt about express- ing negative feelings		
3	Discussion of heart attacks, their cause and how to avoid further trouble	Concern about a future heart attack	Avoid feelings and look for intellectual answer in diet, physical activity, emotions	
		vs. Avoidance and denial of the threat		
4	Angry feelings may get out of hand and hurt others or selves	Anger at wives and others	Discussion of anger and angry incidents in counterphobic way with denial of anxiety	
		Fear of injury to others or selves		
5	The heart patients' state of helplessness and dependency	Desire to be taken care of	Each person should find own solu- tion—a need for love and sympath but also need for action by oneself	
		vs. Shame		
6	Change in sex life since heart attack	Need to play male role	Much joking. Sex not too import- ant as one gets older. Wives not	
		Fear of injury from sex activity	interested	
7	Two members absent because of death of relatives. Need for others and concern for others	Need to be selves and express feelings	People are different but can improve relationships by better	
		vs. Concern about hurting others	communication	
8	Four members absent. Two mem- bers gradually brought out individual problems	Desire for help	Everyone has problems-better	
		vs. Shame over inadequacies	to get help working them out	
9	Recent cardiac deaths. Search for "Why"?	Need to explore and understand vs.	Ventilate anxiety but reduce tension with jokes and intellec- tualizing	
		Death anxiety		
10	Mixed feelings about terminating group. How far can one go in expressing feelings?	Desire to expresss feelings vs.	Expression of feelings demanding on individual but something to	
		Need to maintain control	work toward	

TABLE I.—SEPARATE PATIENT MEETINGS

wanting to tell anybody what's really wrong. It's getting that explosive feeling outside of you and then you can sit down and really relax."

One of the patients expressed the effects of emotions on his symptoms of angina pectoris as follows. "You know I can run a mile and my chest wall will go to hurting. But I can sit right here and start arguing with you and my chest wall will go to hurting a whole lot worse than if I run a mile."

The restless need for activity and inability to relax that these patients characteristically showed were illustrated by the following remark: "I have got to have something to do, so I go to Toastmasters on Tuesday night, on Thursday nights I go to the lodge and I have O.U. on Monday and Wednesday nights. But I can't come home and work and piddle around the house and watch TV. I'd go crazy."

The men's difficulty in becoming deeply involved with others, particularly with their wives, whom they saw as not only providing love and sympathy but also as dominating and controlling, is illustrated by this quote:

"On week-ends I'm glad when I can just get away from her for three or four hours and go out to the lake and try to catch bass. I just need to get away from her for just a little bit because she hounds me to death. But yet, if she wouldn't hound me to death I'd say I was neglected."

The intense feeling of shame, sense of inadequacy and failure, and their attempts to maintain self-esteem by proving they are as good as they used to be, came out strikingly among the men. One patient, in responding to another patient, who was trying to perform inappropriate feats of strength, said: "It looks like you and I are trying to do the same thing, trying to prove to ourselves that we are still capable of doing the things that we did before, but we have to find a limit to it."

Another patient expressed his feeling of shame and inferiority in this way: "Regardless of what business you're in, if you have to turn something

#	Theme	Group conflict	Group solution
1	Need to assume responsibility to feed and protect husband	Concern for husband vs. Irritation at husband's poor co-operation	Accept role of feeder and protector patiently
2	A heavy burden put on wives by husband's cardiac disability	Anger at husband's demands vs. Guilt over anger	Wives owe husbands special privileges but there is a limit to wives' giving
3	Review of husband's heart attack and wife's helpless fright	Anxiety and helplessness vs. Need to be strong and protective	Life not so bad—others worse off. Wives can control many pressures
4	Husbands not as good as before —easily upset. Wives need to be prepared for emergency	Need to express feelings vs. Fear of upsetting and hurting husband	Avoid strong feelings and be on guard for a blow-up
5	Trivial talk and difficulty talking with therapists who are men	Dependency and attraction to doctors vs. Fear of overinvolvement	Avoid involvement and depend- ency on doctors by keeping feel- ings to self
6	Anxiety about husbands and need to depend on doctor yet no right to burden others	Wish to be taken care of vs. Need to be strong and maintain control	Deny own needs in favour of husband's needs
7	Difficulty talking in the group. Is it better to forget unpleasant realities or discuss them?	Need to share anxiety about losing husband vs. Wish to avoid unpleasant feelings	Conflict handled by talking about losing husband but then denying it and forgetting about it
8	Anxiety about the future and what plans should be made in case husband dies	Desire to work through plans for future vs. Desire to escape unpleasantness	Some deny the dangers; others have completed plans; no need to talk more
9	Wife feels responsible for husband and has fear of upsetting him, yet has own needs too	Need to be self vs. Fear of hurting husband	Can learn to be one's self again but still must give extra to husband
10	Desire to help husband but may not know what is happening or what to do	Need to help husband vs. Uncertainty as to the course	Wife can't take all the responsib- ility. Husband and physician can carry some of load

TABLE II.—SEPARATE SPOUSE MEETINGS

down when you're not used to saying 'no' you're always saying 'yes, I can do it'; but it comes to the point now that you have to say 'no' and that's what bothers us more than anything."

The wives expressed feelings about needing to control their husbands, being responsible for them, and somehow preventing them from having future heart trouble. One woman expressed her burden thus: "I try to shield him from the possibility of another one through stress or something that I can control, but there are many things I can't control, but still I like to think that I can."

Many of the wives felt very guilty about past negative, aggressive feelings and behaviour that they had expressed to their husbands and were therefore inhibited in expressing their feelings since the husband's heart attack. One woman stated: "I had it in my head, if I said anything cross to him in any way, that he could die, and I didn't want that on my mind." Another expressed her conflict thus: "If we know what irritates them and deliberately disregard it, should something happen I would feel terribly conscience-stricken for the rest of my life. But you're not exactly normal sometimes, not to express what you want even when you know it may affect them. Because I can sort of tell from intuition the things that will irritate my husband, like you would with a child, and I try to avoid

TABLE	III.—	-MARITAL	PAIRS'	MEETING
-------	-------	----------	--------	---------

Theme	Group conflict	Group solution
Value of meetings—share feelings and find one is not alone. Learn about different ways of looking at and handling problems	Desire to take part in group sharing of feelings vs. Anxiety about self-exposure	Talk freely—joke—intellectualize. Avoid feelings which are very frightening or unacceptable

them. But there are times when I almost revolt and I would like to be able to pick at him."

One of the wives had gone through a very stressful period with intense guilt feelings and inhibitions of expression of negative feeling towards her husband. Her husband completely controlled the family until she finally came to terms with her fear of hurting him. "Well, I have found out that the more normal that I can keep the home the better off he is. Before if he came in and said, 'I am having chest pains' I would be terribly upset and say, 'Oh, dear, how do you feel?' Well, that's worse because I know that he knows when it's severe enough that he has to call the doctor. I think initially I wasn't giving my husband credit for knowing and I sure didn't know what to do. But one can only do so much and that's it."

Physiological Measures

The therapy group and their matched "controls" did not differ significantly from each other with respect to blood presure, pulse, anxiety or depression when these measurements for the six months preceding therapy were compared with those for the six-month period of therapy and the six months following therapy. The therapy group, however, had significantly higher serum cholesterol levels, both during and after therapy group also had significantly higher serum uric acid levels following therapy than their matches (P = .03). The therapy than their matches occurred in the electrocardiograms of the patients while undergoing group therapy.

Follow-up of Clinical Course

Although the follow-up period since the termination of group therapy is short, there have been no subsequent infarctions or hospitalizations for severe chest pain among either the therapy group or their matches. However, among the four patients who refused to participate in therapy, one has experienced a second myocardial infarction and one has had a mild stroke.

DISCUSSION AND CONCLUSIONS

Our observations of this group of coronary patients suggest that considerable anxiety continues at a pre-conscious level for several years after the infarction. This anxiety is rapidly mobilized by environmental events which trigger mental associations to the heart disorder. Hence, it seems reasonable to conclude that the acute life-threatening experience of a heart attack not only demands a tremendous initial pyschological adaptation, but it remains a potent factor in the future life of some individuals.

It was interesting to observe that the patients were able to deal more openly with their feelings than were their spouses, an observation we have also made in patients with other serious clinical illnesses such as incurable cancer. It seems that it is often easier for the seriously ill patient to discuss his feelings than it is for his family or relatives to talk about it. In the men's group, anxiety, hostility, shame and desire for dependency were all freely verbalized, and there was considerable support given by the group to individual members. The men made extensive use of joking and humour to relieve tense periods. In addition to humour, over-compensation and flight into activity appeared to be common coping mechanisms in this group of patients.

The spouses of the patients, although they seemed to benefit from expressing their feelings and sharing common problems with other wives, were definitely more inhibited. They had particular difficulty in dealing with anger toward their husbands and their guilt feelings over their husbands' disabilities. They were also unable to accept and discuss their sexual and dependent needs. They tended to deny their own needs in order to take care of their husbands. They were able, however, to express freely their anxiety and feelings of helplessness about what to do for their husbands and about the uncertainty of the future.

The women's inhibition of negative affects and of their own needs most likely resulted from their sense of responsibility for their husband's disability and their need to tightly control aggressive or sexual desires that might be harmful to the male. The tendency of the wives to deny their own dependency needs in favour of mothering their husbands seemed to be their way of coping with uncertainty. The fact that the two therapists were males may also have contributed to differences in the expression of feelings in the two groups. It seemed that the wives saw the therapists as men who would side with their husbands and be critical of the woman's role in the husband's illness rather than understanding their needs and feelings. Furthermore, in the men's group there was a tendency to compete with the therapists as rival males and to feel concern about the therapists as stronger men. The women, on the other hand, were afraid of their feelings toward the therapists and of becoming involved with them in a dependent way, perhaps through fear of being disloyal to their husbands.

The lack of cohesiveness in the women's group compared with the men's group is also an interesting phenomenon. It may be that the men were drawn closer together as victims of a life-threatening experience, and also because of their shared experiences as research subjects in the heart study. Again, the presence of two male therapists may have been a factor in the difference. The men were able to joke and tease and, at times, use profane language. The women, on the other hand, made only minor use of humour and were completely unable to use uninhibited expressions or earthy language. While the men seemed to be competing with the therapists, the women seemed to compete more among themselves for the attention of the therapists and this may have reduced group cohesiveness.

The group therapy process during the ten 75minute sessions was not a uniform development and was influenced considerably by extraneous events. For example, such coincidental happenings as a fatal heart attack in a locally prominent young football coach led to intense death anxiety and serious doubts about physical fitness programs. About the same week in the sixmonth period, the co-therapist's father died and a patient's brother died of a heart attack. In the session that followed, four of the six patients were absent.

The individual group sessions varied in the level of activity and affective expression. One way of viewing the process conceptually might be Piers' circular model of psychodynamic interaction with alternating periods of activity and reaction.¹⁰ Aggression leads to guilt or anxiety which is followed by the assumption of a passive dependent position. Dependency in turn mobilizes shame which may lead to further aggression and the cycle may recur.

While the ability of individuals to use interpersonal relationships for emotional support varied, it seemed that both the men and the women were able to share some of their feelings and find the group experience helpful and supportive. Perhaps there was less threat of overinvolvement or over-dependency on one person in a group situation, and it was comforting to learn that others were experiencing some of the same feelings and problems. The groups also highlighted differences in personalities, ways of life and solutions to problems, helping patients and their wives to be more flexible in adapting to their life situations.

Serum cholesterol was the only physiological variable that showed a significant increase during the period of therapy even though emotionally charged subjects were discussed. However, both serum cholesterol and serum uric acid were elevated following therapy. It is unknown, however, whether these changes are related to the process of therapy, to environmental factors occurring outside of therapy, or to both of these. The possibility of a detrimental influence on certain physiological parameters of an expressive type of group therapy needs to be considered in view of the report by Titchener, Sheldon and Ross¹¹ of such an effect on blood pressure in a group of hypertensives.

However, the literature on short-term group therapy for organic disease indicates a beneficial effect on the clinical course in most cases.¹² None of our patients during the group sessions experienced angina or physical symptoms other than some anxiety symptoms such as mild restlessness, sweating and palpitations. This suggests that patients can discuss emotionally charged material in a supportive atmosphere without precipitating angina or electrocardiographic changes. This observation has practical implications for the management of cardiac patients. One of the major changes in a patient's family life is that the patient tends to become the centre of the household, and often controls the family when other members are afraid to express their feelings to him for fear of producing cardiac symptoms. This leads to a tense family atmosphere undesirable for the patient's wellbeing.

The therapists also had some concern about imposing stress upon the patients and perhaps producing a heart attack during a meeting. Yet if physicians are to help families deal more realistically with the relative who has had a heart attack, they must learn to respond to the patient on the basis of reality factors rather than be controlled by a fear that the patient will drop dead if they stir him emotionally or encourage him to lead an active life.

Whether the morbidity and mortality of this group of six patients will differ significantly from the control group of six patients who did not experience group therapy, cannot yet be answered. All of these patients will be followed up for a number of years, and it is hoped that data will become available to indicate some trends for future investigation. However, it is extremely difficult to separate the effects of psychotherapy from the complexities of the clinical processes of the disease.

The authors' experience with this group suggests ideas for future studies in the management of patients with myocardial infarction. Since this group therapy program was a pilot study, there is a need for clinical trials using larger treatment and control groups to obtain sufficient data for statistical analysis. In addition, different therapeutic styles need to be tried, such as using joint groups rather than separate groups. Another possibility, particularly since a myocardial infarction affects not only the patient's spouse but also his children, would be to employ family group therapy focused on family interactions.

Consideration also needs to be given to the role of psychological treatment at different phases of the post-infarction period. For example, a few individual psychotherapeutic sessions focused on the acute psychological trauma of a heart attack may be appropriate toward the end of the acute stage while the patient is in the hospital. Later, during the rehabilitative phase, group psychotherapy oriented to problems of returning to work and activities would be valuable. In addition, since our observations suggest that there may be long-term adaptation problems in the post-infarction patient, shortterm group sessions might be appropriate during the chronic phase. Such sessions could be helpful for those patients who are having specific adjustment problems and who need additional support beyond that provided in the usual busy practitioner's office.

Ten patients with coronary disease Summary who were experiencing difficulty in the long-term adaptation to their heart attacks were offered focused short-term group psychotherapy. Six of these patients chose to participate in 10 biweekly group sessions while their wives met for parallel group therapy on alternate weeks.

The therapists observed that the patients readily became anxious about further heart attacks in response to certain environmental stimuli and coped with this anxiety by joking or counterphobic behaviour. The patients also expressed deep feelings of loss of self-esteem and conflict over their need to be cared for in the presence of their continuing need to be independent. The wives saw themselves as feeders and protectors of their husbands and appeared to be overly protective and non-demanding. They were anxious regarding the uncertain future and had guilt feelings about how they might have contributed to the husband's heart attack.

Physiological monitoring of the patients at sixweek intervals revealed significantly higher serum cholesterol levels during and following therapy and significantly higher uric acid levels following therapy. No significant change occurred in pulse, blood pressure or electrocardiogram and no anginal attacks were experienced during therapy sessions.

As a result of the group therapy, patients and their wives appeared to achieve an improved psychosocial adaptation. The clinical follow-up has been too brief to evaluate the long-term effect. However, among the four patients refusing therapy one has had a second infarct and another a mild stroke. None of the six patients on therapy or their "matches" have shown physical deterioration. More extensive studies of this treatment modality for coronary patients appear to be indicated.

A 10 coronaríens qui trouvaient difficile Résumé de s'adapter à leurs crises cardiaques, on a offert une brève cure de psychothérapie collective, centrée sur leur affection. Six de ces candidats ont accepté de participer à 10 séances bimensuelles, leurs femmes faisant partie de groupes parallèles avaient leurs séances durant les périodes alternatives.

Les thérapeutes notèrent d'abord chez leurs malades une nette tendance à l'anxiété concernant les crises futures, pouvant survenir sous l'influence de certains stimuli nés dans leur milieu. Ils tentaient de combattre cette angoisse par des plaisanteries ou en adoptant une attitude de lutte contre la phobie. Les malades admettaient souffrir vivement de la perte de leur amour-propre et de leur état de dépendance vis-à-vis leur entourage alors qu'ils souhaitaient en être indépendants. Les femmes se voyaient dans le rôle de mère-nourricière et de protectrice de leur mari et tombaient dans le travers d'une protection excessive et se montraient trop peu exigeantes. Elles redoutaient l'avenir et se sentaient vaguement coupables d'avoir contribué à la maladie de leur mari.

La surveillance physiologique des malades à intervalles de six semaines a révéle une augmentation de la cholestérolémie pendant et après le traitement et une uricémie élevée après le traitement. Les médecins n'ont constaté aucune modification du pouls, de la tension artérielle ou du tracé électrocardiographique. Les malades n'ont pas eu de nouvelle crise pendant les séances thérapeutiques.

Cette psychothérapie collective s'est traduite par une nette amélioration de l'adaptation psychique et sociale des malades et de leurs femmes. Le recul clinique a été trop court pour pouvoir juger de l'effet du traitement à long terme. Cependant, parmi les quatre malades qui avaient refusé le traitement, on en compta un qui subit un deuxième infarctus et un autre qui eut une crise bénigne. Aucun des six malades avant accepté le traitement n'ont montré d'aggravtion de leur état physique. Il nous paraît indiqué de plus étudier cette modalité du traitement des coronariens.

REFERENCES

- 1. World Health Organization, Expert Committee on Rehabilitation of Patients with Cardiovascular Dis-eases: W.H.O. Techn. Rep. Ser. No. 270, 1, 1964.
- eases: W.H.O. Techn. Rep. Ser. No. 270, 1, 1964.
 VERWOERDT, A. AND DOVENMUEHLE, R. H.: Geriatrics, 19: 856, 1964.
 KLEIN, R. F. et al.: J. A. M. A., 194: 143, 1965.
 NEW, P. K. et al.: Social Science and Medicine, 2: 111, 1968.
 KAUFMAN, J. G. AND BECKER, M. C.: Geriatrics, 10: 355, 1955.
 BRUHN, J. G. : J. Okla. Med. Ass., 60: 65, 1967.
 BRUHN, J. G. et al.: Amer. J. Med. Sci., 251: 629, 1966.
 WHITMAN, R. M. AND STOCK, D.: Psychiatry, 21: 269, 1958.
 WOLBERG, L. R.: The technic of short-term psycho-

- WOLLERG, L. R.: The technic of short-term psycho-therapy. In: Short-term psychotherapy, edited by L. R. Wolberg, with nine contributors, Grune & Stratton Inc., New York, 1965, p. 127.
 PIERS, G. AND SINGER, M. B.: Shame and guilt: a psychoanalytic and a cultural study, monograph in American Lectures in Psychiatry, Charles C Thomas, Publisher, Springfield, Ill., 1953.
 TITCHENER, J. L., SHELDON, M. B. AND ROSS, W. D.: J. Psychosom. Res., 4: 10, 1959.
 WOLF, A.: Short-term group psychotherapy. In: Short-term psychotherapy, edited by L. R. Wolberg, with nine contributors, Grune & Stratton Inc., New York, 1965, p. 219.