

1959

Etiology of headache in one hundred selected cases at Omaha Veterans Administration Hospital

Margaret H. Peterson
University of Nebraska Medical Center

This manuscript is historical in nature and may not reflect current medical research and practice. Search [PubMed](#) for current research.

Follow this and additional works at: <https://digitalcommons.unmc.edu/mdtheses>

Recommended Citation

Peterson, Margaret H., "Etiology of headache in one hundred selected cases at Omaha Veterans Administration Hospital" (1959). *MD Theses*. 2416.
<https://digitalcommons.unmc.edu/mdtheses/2416>

This Thesis is brought to you for free and open access by the Special Collections at DigitalCommons@UNMC. It has been accepted for inclusion in MD Theses by an authorized administrator of DigitalCommons@UNMC. For more information, please contact digitalcommons@unmc.edu.

THE ETIOLOGY OF HEADACHE
IN ONE HUNDRED SELECTED CASES
AT OMAHA VETERANS ADMINISTRATION HOSPITAL

Margaret H. Peterson

Submitted in Partial Fulfillment for the Degree of
Doctor of Medicine

College of Medicine, University of Nebraska

April 1, 1959

Omaha, Nebraska

Table of Contents

	Page
I. Introduction	1-6
Purpose	1
Method	1
II. Discussion	
Histaminic Cephalgia	7
Tension Headache	11
Anxiety Reaction	14
Psychophysiologic Reaction	16
Conversion Reaction	18
Migraine	20
Somatization Reaction	23
Etiology Undetermined	23
Miscellaneous	25
III. Conclusions	
Distribution	29
Localization	30
Associated Symptoms	31
Precipitating Causes	32
Duration of Complaint	33
Frequency of Attacks	33
Duration of Attacks	33
Onset of Attacks	33
Family History	34
Psychiatric Evaluation	34
Past Medical History	35
Sources of Relief	36
IV. Summary	38-40
Bibliography	
Acknowledgements	
Appendix	

INDEX TO GRAPHS

	<u>Following Page</u>
Location of Pain, Histaminic Cephalgia	7
2. Associated Symptoms, Histaminic Cephalgia	8
3. Duration of Complaint, Histaminic Cephalgia	8
4. Past Medical History Histaminic Cephalgia	9
5. Sources of Relief, Histaminic Cephalgia	10
6. Location of Pain, Tension Headache	12
7. Associated Symptoms, Tension Headache	12
8. Duration of Complaint, Tension Headache	12
9. Past Medical History, Tension Headache	13
10. Sources of Relief, Tension Headache	13
11. Location of Pain, Anxiety Reaction	14
12. Associated Symptoms, Anxiety Reaction	14
13. Duration of Complaint, Anxiety Reaction	15
14. Past Medical History, Anxiety Reaction	16
15. Sources of Relief, Anxiety Reaction	16
16. Location of Pain, Psychophysiologic Reaction	17
17. Associated Symptoms, Psychophysiologic Reaction	17
18. Duration of Complaint, Psychophysiologic Reaction	17
19. Past Medical History, Psychophysiologic Reaction	17
20. Sources of Relief, Psychophysiologic Reaction	18
21. Location of Pain, Conversion Reaction	18
22. Associated Symptoms, Conversion Reaction	18
23. Duration of Complaint, Conversion Reaction	19
24. Past Medical History, Conversion Reaction	19
25. Sources of Relief, Conversion Reaction	20
26. Location of Pain, Migraine	20
27. Associated Symptoms, Migraine	21
28. Duration of Complaint, Migraine	21
29. Past Medical History, Migraine	22
30. Sources of Relief, Migraine	22
31. Location of Pain, Headaches of Undetermined Etiology	24
32. Associated Symptoms, Undetermined Etiology	24
33. Duration of Complaints, Undetermined Etiology	24
34. Past Medical History, Undetermined Etiology	25
35. Sources of Relief, Undetermined Etiology	25
36. Distribution of Headache Types in this Study	29
37. Localization of Headache, All Types	30
38. Location of Pain by Area, All Types	30
39. Associated Symptoms, Total Group	31
40. Duration of Complaint, Total Group	31
41. Frequency of Attacks, All Types	32
42. Psychiatric Evaluation, All Types	34
43. Past Medical History, Total Group	35
44. Sources of Relief, Total Group	35
45. Most Common Sources of Relief, All Types	36

Index to Tables (Appendix)

Table I	Distribution of Headache Types
Table II	Localization of Headaches
Table III	Symptoms Associated with Headaches
Table IV	Factors Precipitating Headaches
Table V	Total Duration of Headaches as a Complaint
Table VI	Frequency of Headache Attacks
Table VII	Duration of Individual Headache Attacks
Table VIII	Time of Onset or Intensification of Attacks
Table IX	Results of Psychiatric Evaluation
Table X	Areas Involved in Past Medical History
Table XI	Sources of Relief

THE ETIOLOGY OF HEADACHE
IN ONE HUNDRED SELECTED CASES
AT OMAHA VETERANS ADMINISTRATION HOSPITAL

I Introduction

Headache is one of the most common complaints seen by physicians today. It has been estimated that over eighty percent of adults suffer from headache at some time in their lives. For most people, an occasional headache is of so little concern that they do not consult a doctor, but for a few, headaches are of sufficient intensity or duration to provoke a need for investigation. The persons in this study were of the latter group. Their headaches caused them enough distress that they sought medical attention.

Purpose: The purpose of this project was to study the complaint of headache with special reference to clinical pictures and to the patients' past medical histories.

Method: One hundred case records from Omaha Veterans Administration Hospital were reviewed. These records were those of male patients in whom headache was a complaint of sufficient magnitude to be coded separately and, in most cases, was the chief complaint for which the patient was examined. Those patients in whom headache was incidental to hypertension, known intracranial neoplasm, recent concussion, or febrile states were not included,

nor were those who suffered from post-spinal anesthesia headache. The records were studied to obtain the following information on each patient: Complete history of the headaches including frequency and duration of each attack, precipitating factors, if known, localization of the pain, symptoms associated with the headache attack, sources of relief from pain, effectiveness of the treatment, total time that the patient had experienced headaches as a complaint, family history of similar headaches, past medical history of the patient, and results of psychological testing or psychiatric evaluation. Not all of the information was available on every patient.

The diagnostic groups used in this study were Histaminic Cephalgia, Tension Headache, Conversion Reaction, Somatization Reaction, Anxiety Reaction, Psychophysiologic Reaction, Migraine, and Etiology Undetermined. (See Table I). The seven patients placed in the Miscellaneous group had the following diagnoses: Cephalgia due to Allergy to Alcohol; Hypochondriacal Reaction; Cephalgia Secondary to Cervical Myalgia and Tension; Myositis, Left Trapezius with Secondary Cephalgia; Headache Secondary to Coryza; Cephalgia Associated with Nasal Congestion, Allergy, Post-trauma; Histamine Cephalgia, Tension Headache, Anxiety Reaction.

The diagnoses shown were those of the physicians to whom the patients were assigned at Veterans Hospital, and some variation from the typical pictures as described in the literature may be

found in individual cases. In some instances, the physician's progress notes would indicate that the diagnosis was made by the exclusion of other entities or on the basis of clinical response to treatment. Fifteen cases were shown in the official records as "Etiology Undetermined". This group included those patient's whose clinical pictures were even less clear cut and to whom a diagnostic label could not be attached. In several of these cases, a tentative diagnosis had been made, but the official designation was Etiology Unknown.

Localization of the headaches was recorded as reported by the patient or as interpreted by the person taking the history, and was tabulated as being unilateral, bilateral or diffuse only if stated thus. For example, in the absence of further explanation, "pain in the right temple" would be tabulated as unilateral and temporal, but "back of the neck to forehead" would be shown as neck and frontal with no designation as to lateral distribution.

Symptoms associated with the patient's headaches were grouped into larger categories. All nasal complaints of "stiffness", discharge or swelling, were tabulated together under Nasal Discharge. Gastrointestinal complaints included nausea, vomiting or epigastric distress. Numbness, paresthesia, or weakness of hands or feet were included under a single heading.

The total length of time that the patient had experienced headaches was divided for tabulation in the following manner: Less than six months, more than six months but less than one year, one year or more but less than two years, two years or over but less than five years, five years or more but less than ten years, ten years or more but less than fifteen years, more than fifteen years but less than twenty years, and twenty years or more. In the few cases where the patient stated only that he had had headaches for "years", an estimate of five years was made.

Frequency of occurrence of the headache attacks was consolidated into the most frequently expressed time periods. Because of its importance in the diagnosis of histaminic cephalgia, an additional notation was made if the patients stated that their headaches came in groups with symptom-free intervals between the clusters of headache attacks.

The duration of the individual headache attacks was the most difficult to determine. The following estimations were made: When the patient stated that headaches lasted only a "short time", this was tabulated as less than 3 hours. If he said "several hours", it was recorded as 3-12 hours. If he stated a "few days" it was shown as 1-2 days. In a few cases, the patients said that their headaches lasted from a few hours to several days. Since it could not be determined from the records

in these cases whether they meant the single headache attack or the current series of attacks, these were recorded as the shortest period mentioned.

Few patients reported a time of day in which they were likely to have headaches begin or be intensified. These figures were included in a table because of the relationship which has been found to exist between histaminic cephalgia and awakening from sleep.

In tabulating sources of relief, the mild non-narcotic agents were placed together so that this category included aspirin, APC* and Empirin**. The trade names Cafergot*** and Demerol**** were used.

Precipitating causes were those reported by the patients, not the opinion of the examining physician.

Psychological testing was carried out, or a psychiatric evaluation obtained on 26 patients. A summary of these reports was tabulated in general categories such as anxiety and immaturity.

Past medical history was divided according to the body area or function involved such as skin, gastrointestinal tract or respiratory system. Trauma was tabulated separately and included all forms of injury such as burns, falls, and

- * Aspirin, phenacetin, caffeine
- ** Aspirin, acetophenetidin, caffeine
- *** Ergotamine tartrate, caffeine
- **** Meperidine

fractures sufficiently severe to be reported by the patient. This trauma group was subdivided into trauma involving body areas other than the head and trauma involving the head. If an individual patient suffered injury to both body and head, this was recorded once under each heading.

Percentages tabulated on the Tables in the Appendix are the percentages of each group not of the total. For example, nineteen of the thirty-four patients with Histaminic Cephalgia stated that their headaches were unilateral. This is 56.6% of the patients with Histaminic Cephalgia, but only 19% of the total number of patients in the study.

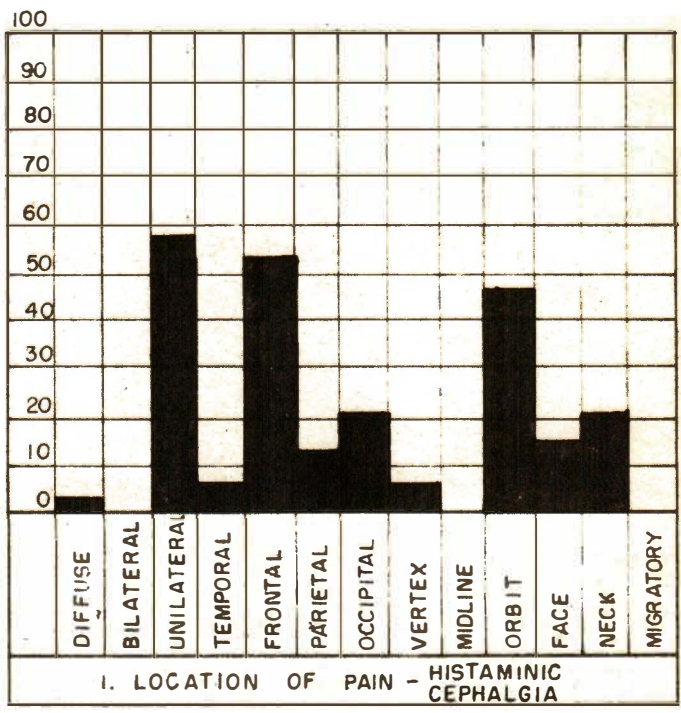
II DISCUSSION

HISTAMINIC CEPHALGIA

Typical Picture: In this series, a patient diagnosed as having histaminic cephalgia would present with a unilateral headache, which started during the night, was frontal in distribution and involved the area around the eye. He would also have nasal discharge or stuffiness, and might have some form of gastrointestinal distress. He would have suffered from headaches intermittently for 5 years, would have experienced his headaches in groups or clusters with symptom-free intervals between and would have had headaches almost daily during an attack group. He would have obtained some relief from the non-narcotic analgesics or from Cafergot, but would have been more permanently aided by a course of histamine desensitization. He would have had other EENT complaints, especially sinusitis and allergy and would have had at least one fracture. Histaminic headache was the most frequent type of headache found in this study, accounting for 34 of the one hundred cases.

Localization: As described by the patients the headaches were most likely to be unilateral (19), frontal (18) and involving the area around the eye (16). Less frequently they involved the neck (7) and occiput (7) or the face (5). See Table II.

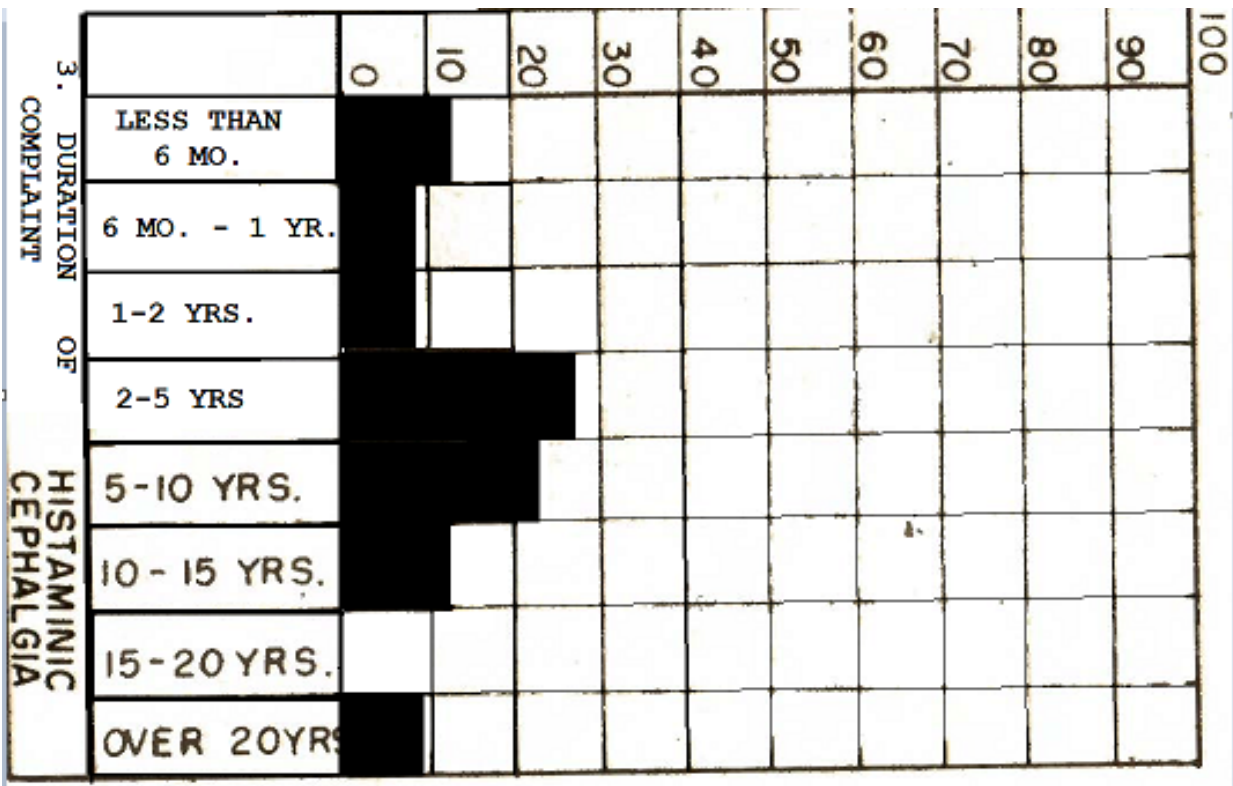
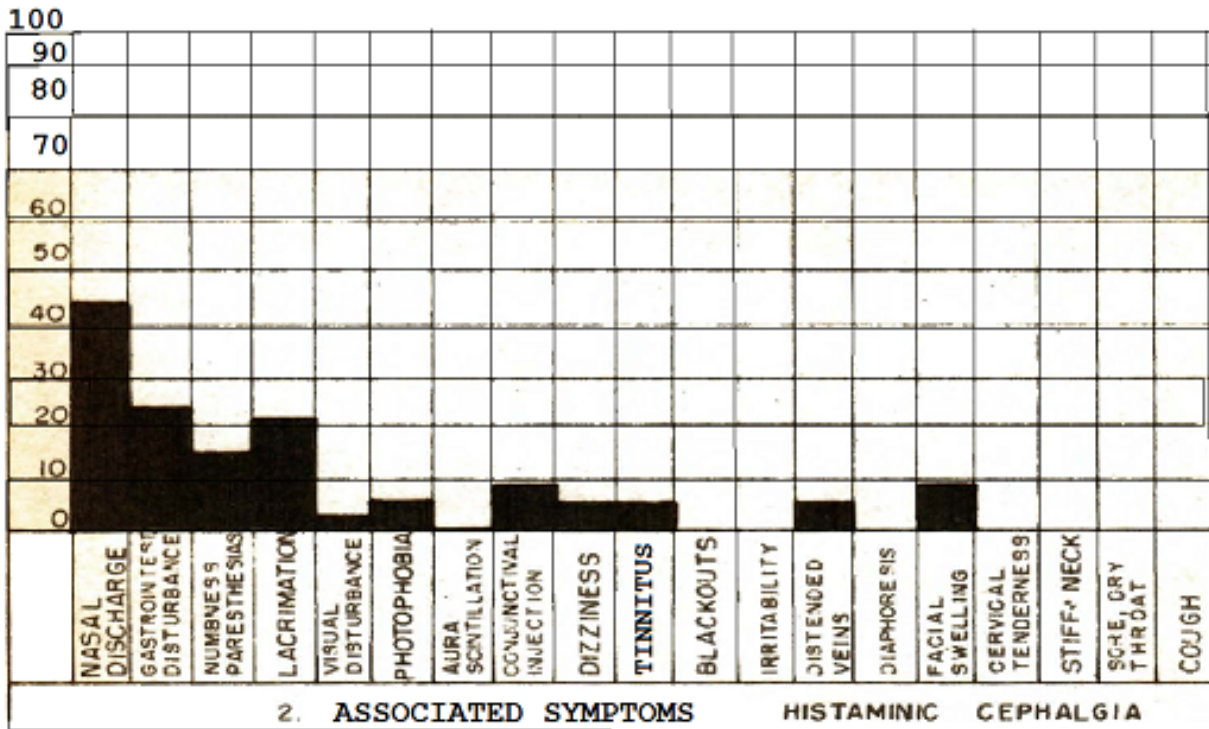
Associated Symptoms: Nasal discharge, stuffiness, odors in the nose, or a feeling of swelling in the nasal passages were



experienced by 15 of the patients with histamine type headaches. Seven reported lacrimation and eight reported nausea, vomiting or other signs of gastrointestinal distress. Conjunctival injection (3) and facial swelling (3) were experienced by a smaller number than would be expected in this type of headache. Neurological signs of numbness, tremor or weakness were associated with headaches in five patients. See Table III.

Precipitating Causes: Only ten of the patients in this group reported their own idea of the precipitating factors in their headaches. "Nervousness" (3), stress worry, or tension (3) were the most frequently expressed causes. The presumed precipitating factors varied from stooping or leaning forward (2) to lying down (1) or erect posture (1), weather (1), turbulent childhood (1), and divorce (1). See Table IV.

Duration of Complaint: The patients in this group had complained of headache as a major symptom for long periods of time. An estimate of the total duration of headaches as a complaint was available in 33 of the 34 cases. Three patients had had headaches for over twenty years. Four had had headaches for ten to fifteen years. The largest number of patients were in the group who had suffered from headaches for from two to five years (9) and from five to ten years (7). Those who had headaches of recent origin, 6 months or less were only four. Three had headaches for six months to a year, and three for one to two years. See Table V.



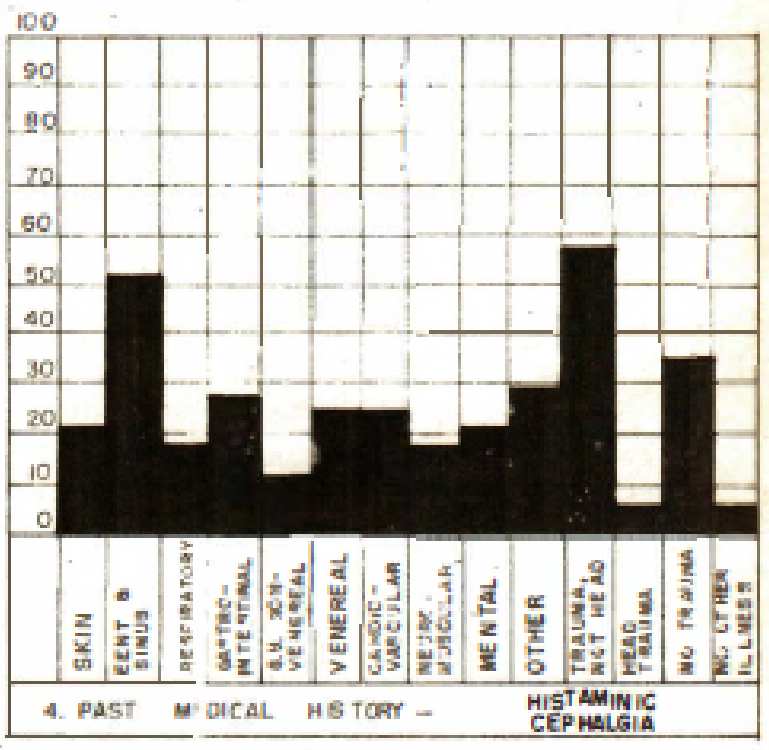
Frequency of Attacks: Seven of this group reported that their headaches were likely to occur in clusters with symptom-free intervals between. Four stated that the headaches were intermittent, and four said that they were almost constant. Three had headaches once or twice a month, five had headaches daily and six had several headaches a week. See Table VI.

Duration of Attacks: Headaches in this group were characteristically of short duration. Seven patients reported that their headaches lasted less than three hours, six that they were of three to twelve hours duration. In six cases the headaches lasted over twelve hours. See Table VII.

Onset of Attacks: Intensification or onset of headaches was reported as occurring at a specific time of day by fourteen patients. Seven stated that night or during sleep was the most frequent time of onset, four reported headache on arising, two indicated evening, and one afternoon. See Table VIII.

Family History: A family history of headaches similar to the ones experienced by the patients was reported by four of this group.

Psychiatric Evaluation: Only four of these patients were evaluated. They were described as immature (2), passive or dependent (2), hostile or aggressive (2), in conflict (2), rigid and conforming (1), and anxious (1). See Table IX.



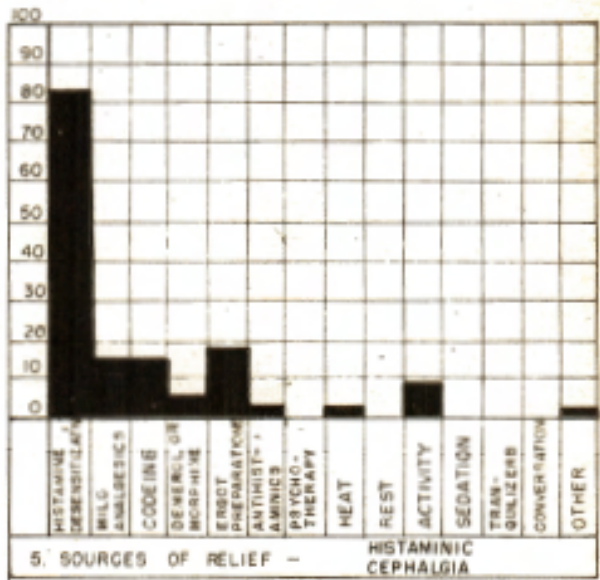
4. PAST MEDICAL HISTORY -

HISTAMINIC CEPHALGIA

Past Medical History: The patients in the histamine headache group reported a large number of complaints related to the eyes and nasopharynx (18), including allergy and sinusitis. However, eighteen of this histamine group also reported a history of major trauma to body areas other than the head and two had had head trauma. Twelve of the thirty-four reported no trauma. Repeated episodes of trauma were experienced by only three patients. Gastrointestinal distress other than that associated with headaches was reported by nine patients, venereal disease by eight, cardio-vascular complaints by eight, emotional illness by seven, skin complaints by seven, respiratory system disease by six, musculoskeletal complaints by six, and non-venereal genitro-urinary illness by four. No records were available to indicate how successful efforts to treat previous illnesses had been. See Table X.

Sources of Relief: The most commonly experienced single factor in this group was response to histamine desensitization. Twenty-eight of the patients reported good response to histamine injections for periods ranging from the patient who experienced complete relief after only one injection of histamine * to those who had been successfully kept symptom-free for three years or longer, as well as those who had been dismissed as having

* He had previously had no relief from analgesics or antihistamines, and had been helped only by meperidine. His headaches had been present for fourteen years.



received maximum benefit after varying periods of treatment. Three of the patients in this group had either no relief from histamine desensitization or little relief. Gynergen* helped one of these and Cafergone** was effective in another. In three of the histamine headache group desensitization was not begun. One of these obtained relief from coffee, another from antihistaminics, and the other from codeine. Among those helped by desensitization, the non-narcotic analgesics helped five, codeine four, and the caffeine and ergot preparations four. Activity was reported as beneficial by three patients. See Table XI.

TENSION HEADACHE

Typical Picture: The typical patient in this group would have suffered from headaches for less than five years, most likely less than 6 months. He would report that his headaches were nearly constant or occurred daily and were present in the daytime only. The headaches would be unilateral, involving usually the frontal areas, occiput and neck and would be accompanied by epigastric distress, dizziness or nasal discharge. Relief would be obtained from mild non-narcotic analgesics. The patient's past medical history would have included episodes of gastrointestinal distress, injury, sinusitis and respiratory complaints. Tension headache was the second most frequently made diagnosis and accounted for thirteen cases.

* Ergotamine Tartrate.

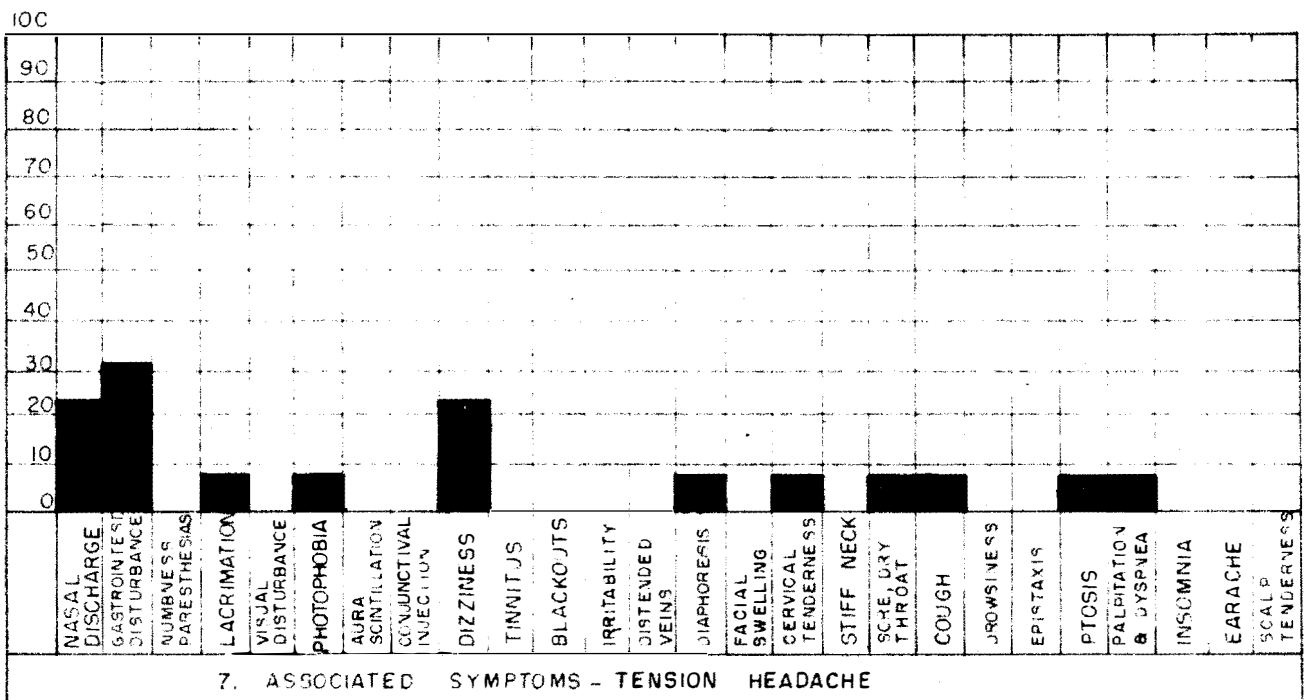
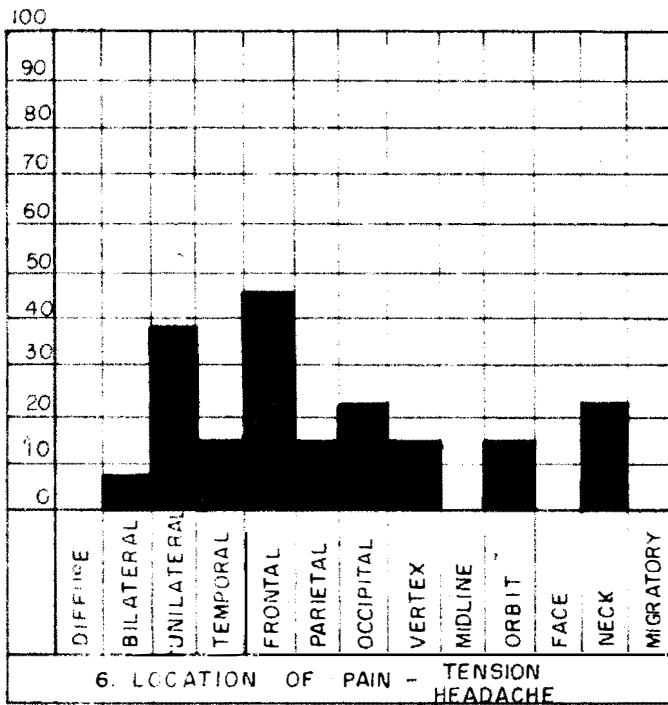
** Ergotamine Tartrate, Caffeine.

Localization: Again, these headaches tended to be unilateral (5), frontal (6), and sometimes involved the occipital region (3), and neck (3). Two patients reported temporal area localization as did two parietal, two vertex, and two orbital or periorbital.

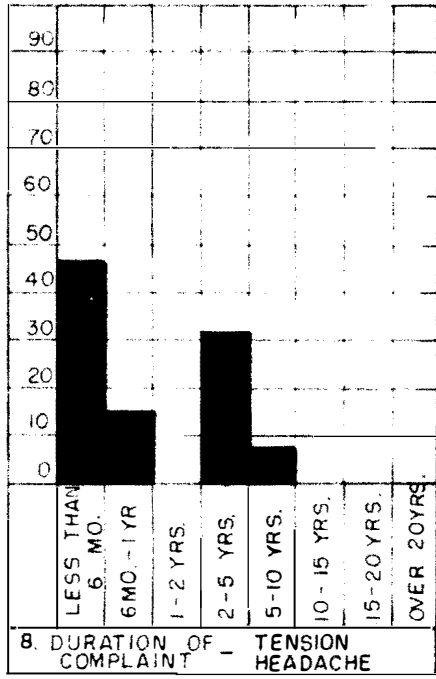
Associated Symptoms: The most frequently associated symptoms were nausea, vomiting gastric distress (4), but three patients reported nasal discharge or stuffiness, and three experienced dizziness. Other complaints are listed in Table III.

Precipitating Causes: Nine of these patients reported what they believed to be precipitating factors, a higher percentage than the histamine group. These factors are tabulated in Table IV and showed no definite pattern.

Duration of Complaint: This group had suffered from headaches for relatively short periods of time. Six of the group reported that they had had headaches for six months or less, and six others had suffered from headaches for less than five years. Only three of these patients had complained of headache as a major symptom at an earlier time so that it appeared that headache was a relatively new complaint with the men in this group. See Table V for a complete listing of the duration of complaint in this group.



100



8. DURATION OF COMPLAINT - TENSION HEADACHE

Frequency of Attacks: Three patients reported that their headaches were constant or nearly so and three others stated that theirs occurred daily. One had headaches only one to three times a week.

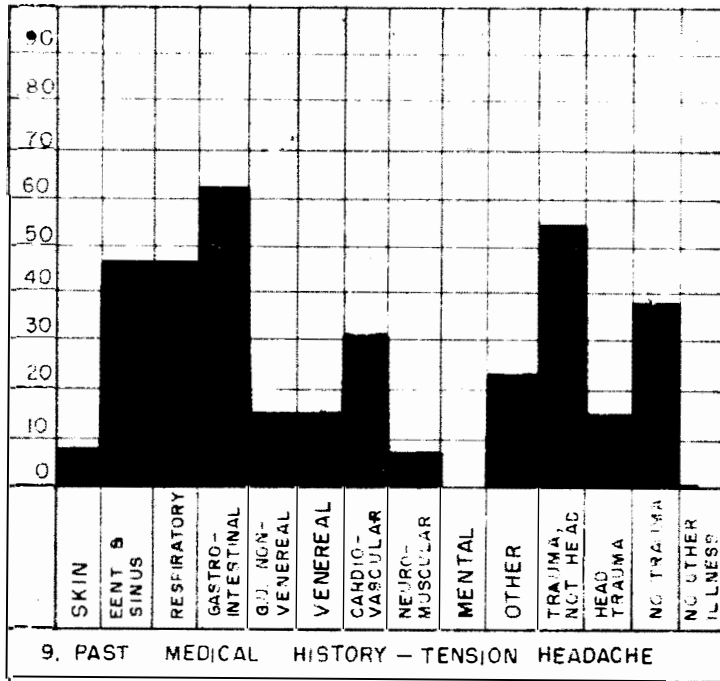
Duration of Attacks: Two patients experienced brief headaches lasting less than three hours.

Onset of Attacks: Intensification or onset occurred only in the day time in two patients. As Table VIII would indicate, there was no pattern to the onset of these headaches.

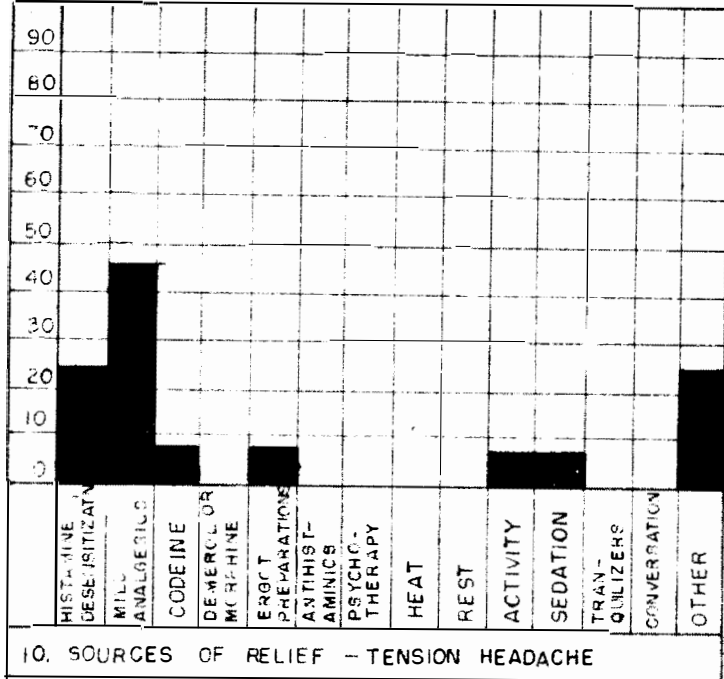
Past Medical History: This group was most likely to have had a prior gastro-intestinal disturbance (8). However, trauma to areas other than the head was experienced by seven and trauma to the head by two. There was no history of trauma in five patients. Eye, ear, nose and throat complaints, especially sinusitis and allergy, were reported by six, and respiratory illnesses by six. Four patients had experienced cardio-vascular symptoms and four had genitourinary complaints - two venereal and two prostatic.

Sources of Relief: Mild analgesics were the most effective agents in treating these headaches, with six patients reporting relief. Histamine desensitization was used successfully in three patients, two of whom had reported stuffy nose as associated symptoms. Other sources of relief are listed in Table XI. Two patients in this group stated that they were not helped by aspirin.

100



100

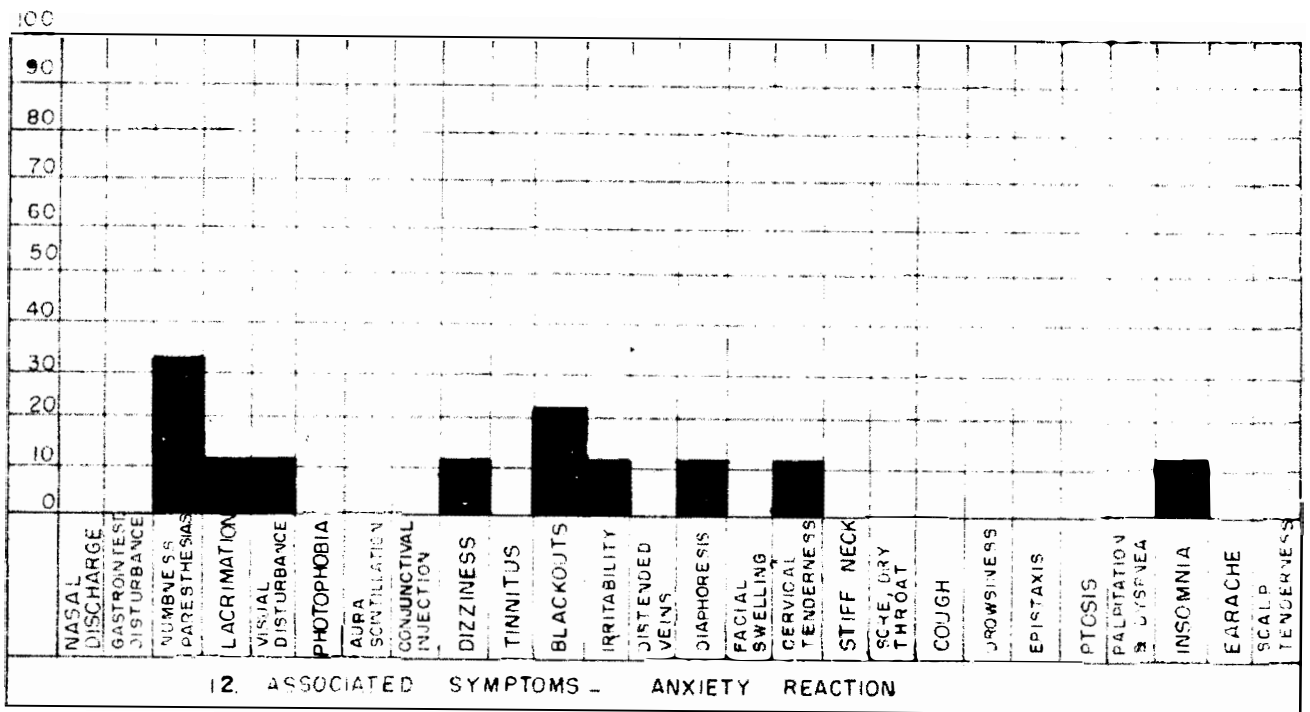
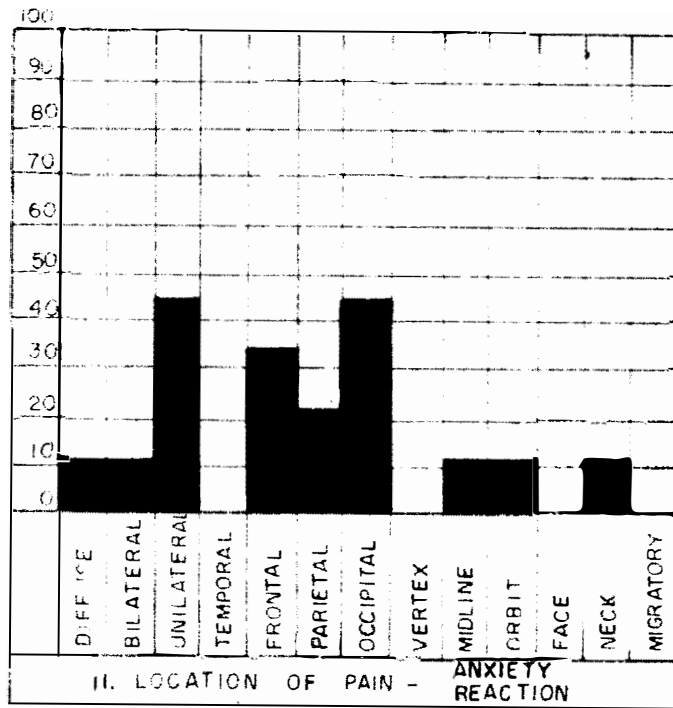


ANXIETY REACTION

Typical Picture: A patient presenting headache as part of an anxiety reaction would have unilateral pain involving the occipital, frontal and parietal areas usually relieved by mild non-narcotic analgesics. His headaches would have been present as a symptom for over one year and would likely have troubled him for five to ten years. They would have occurred several times a week and would have lasted less than one day. Nervousness and stress would be reported as precipitating factors and numbness, paresthesias or blackouts as associated symptoms. The patient's previous medical history would have included trauma, possibly repeated episodes of injury, and ENT or sinus complaints. Anxiety, immaturity, hostility aggression or schizoid tendencies would be part of his emotional makeup. Nine patients of the one hundred were diagnosed as suffering from anxiety reactions.

Localization: Four reported that their headaches were unilateral, one that they were diffuse, and one that they were bilateral. Four stated that the headache involved the occipital region, three the frontal and one the parietal areas. Only one reported that the headache was midline, one that it involved the orbit and one the neck.

Associated Symptoms: Numbness, paresthesias or weakness were associated with headache in three cases and two



patients experienced blackouts. Other associated symptoms are listed in Table III.

Precipitating Causes: All of the nine patients in this group reported what they believed to be precipitating factors. "Nervousness" (3), stress, worry, or tension (2) were most frequently mentioned. Other causes noted were essentially specific forms of stress and are listed in Table IV.

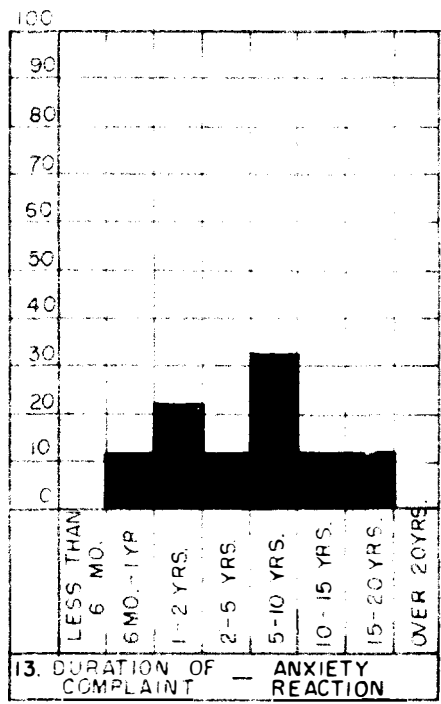
Duration of Complaint: This group had headaches of long duration. Three patients reported having headaches for five to ten years. Four patients had suffered from headache as a recurrent complaint for which they had repeatedly sought treatment.

Frequency of Attacks: Two patients had headaches several times weekly, one daily and one reported that they were intermittent.

Duration of Attacks: As can be seen from Table VII, there was no pattern to the duration of individual attacks.

Onset of attacks: Only one patient reported that his headaches were likely to start at a particular time of day - the one who thought that the precipitating cause was awakening from a bad dream. *

* Psychiatric evaluation indicated that he was suffering from a combat neurosis.



Psychiatric Evaluation: Five patients in this group had psychiatric evaluation or psychological testing. Three were described as anxious, two as immature, and two as having hostile or aggressive tendencies.

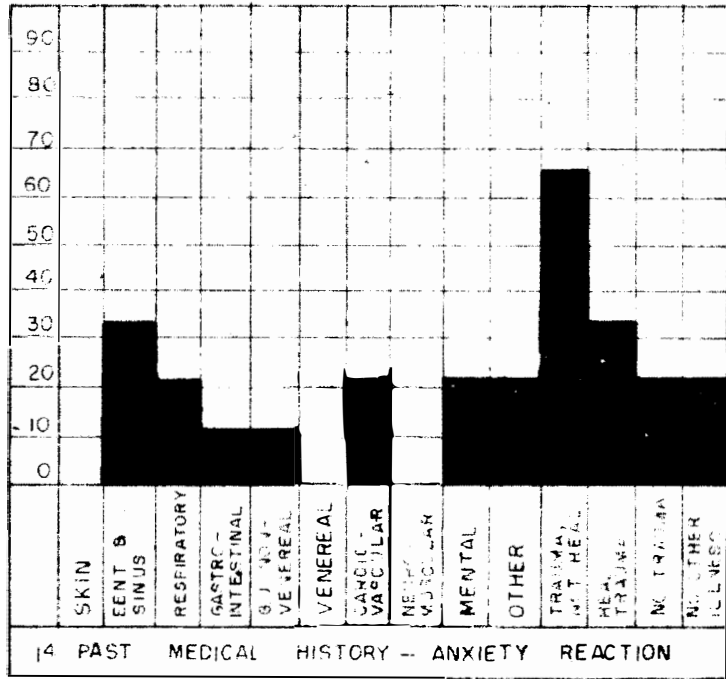
Past Medical History: Trauma was the most frequent complaint in the past history of this group. Only two did not report injury of any kind. Three patients experienced repeated trauma and three were injured in auto accidents. Three complained of ENT troubles, two of respiratory illness, two of cardiovascular complaints, and two of emotional illness. Two had no reported previous illnesses or injuries.

Sources of Relief: The mild non-narcotic analgesics were most effective in this group with six patients reporting relief.

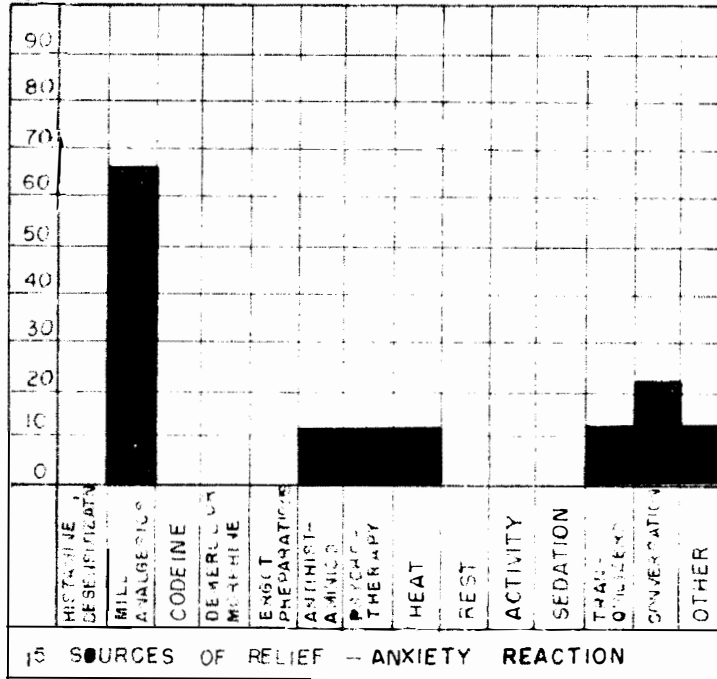
PSYCHOPHYSIOLOGIC REACTION

Typical Picture: This group was notable in its lack of outstanding characteristics. Their headaches were variable in location, tending to be diffuse, frontal, occipital, or orbital, accompanied by nausea, vomiting, or epigastric distress, occurring several times weekly lasting less than twelve hours, brought on by family troubles and relieved by mild analgesics. The person having these headaches would be passive, dependent, immature, anxious, and hostile. His past medical history would have included an episode of trauma. Psychophysiologic reaction was the diagnosis in nine cases.

100



100



Localization: Three patients reported that their pain was diffuse, two said it was bilateral and one unilateral. In this group also, the frontal (4) and Occipital (4) regions were the most common locations and three patients reported pain in the eye region.

Associated Symptoms: Nausea, vomiting or other forms of gastro-intestinal distress were associated with the headaches in five of these patients. Three experienced numbness, paresthesias or weakness; two had vertigo, and two reported irritability.

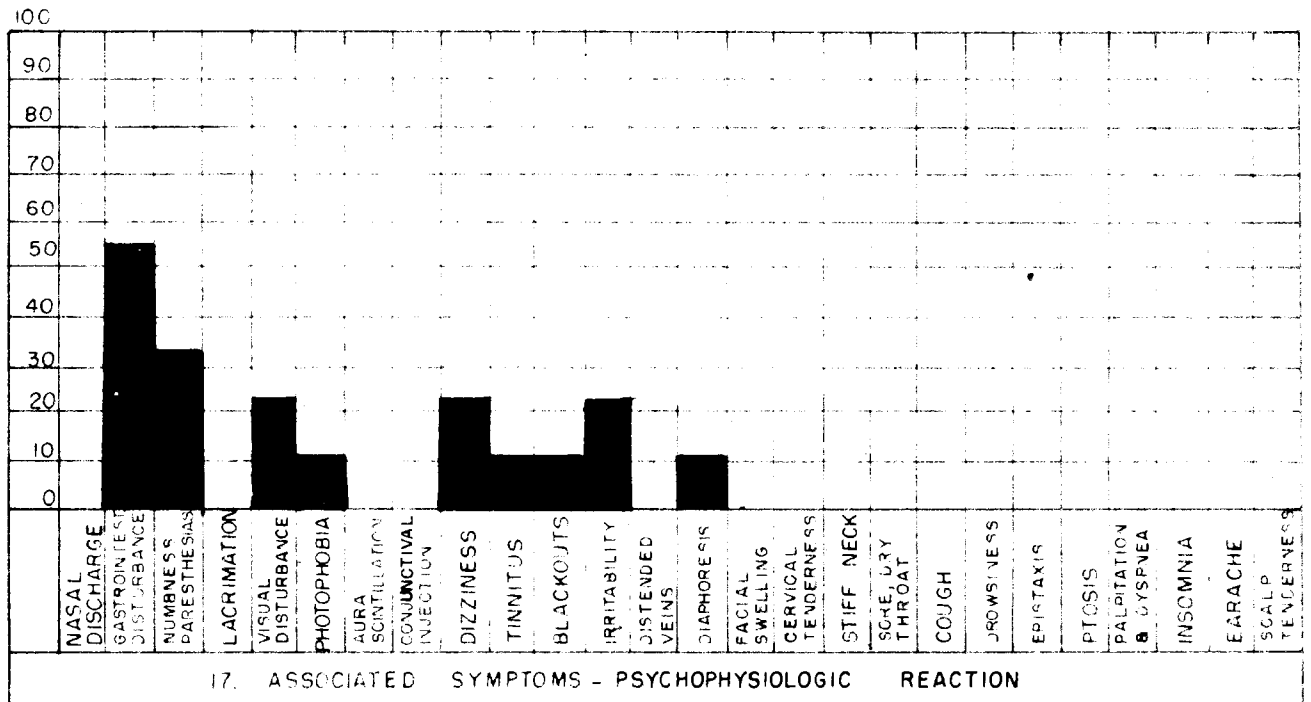
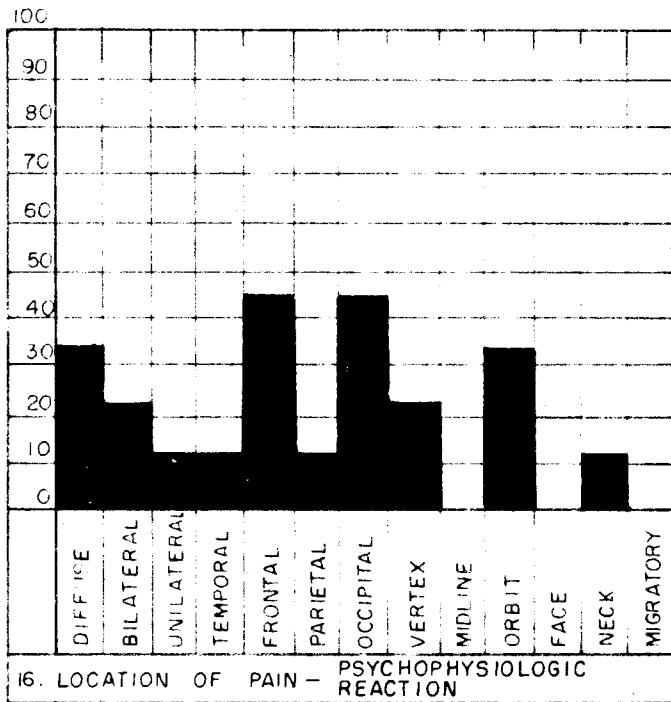
Precipitating Causes: Of the seven patients reporting precipitating factors, three mentioned family discord. "Nervousness" (2), stooping (2) and financial troubles (2) were mentioned.

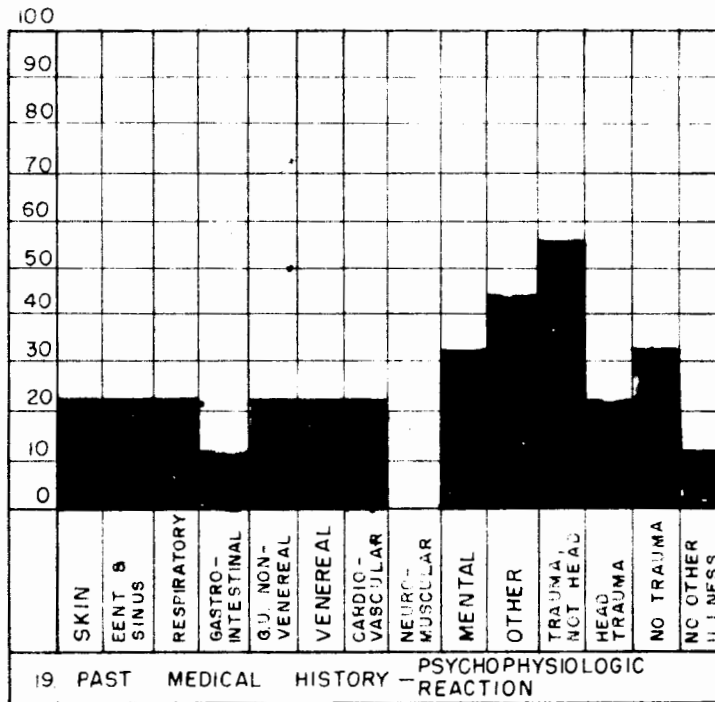
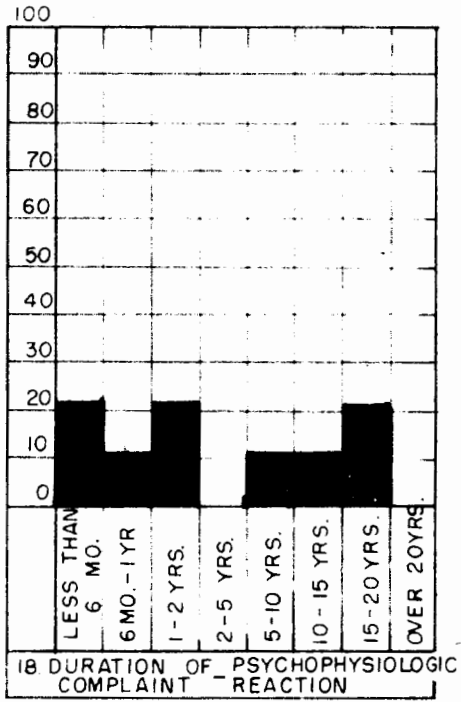
Duration of Complaint: The total time that these patients had complained of headache varied greatly. No definite pattern was established. Four of these patients had sought treatment intermittently over a period of several years.

Frequency of Attacks: Three patients reported that their headaches occurred several times a week, and two that they were nearly constant.

Duration of Attacks: Headaches of less than three hours duration were reported by two patients, and from three to twelve hours by two. One patient had headaches lasting from two to five days.

Onset of Attacks: The one patient who noted a time of day when his headaches were likely to occur mentioned days only.





Psychiatric Evaluation: Four of these patients were evaluated. Three were found to be passive, dependent.

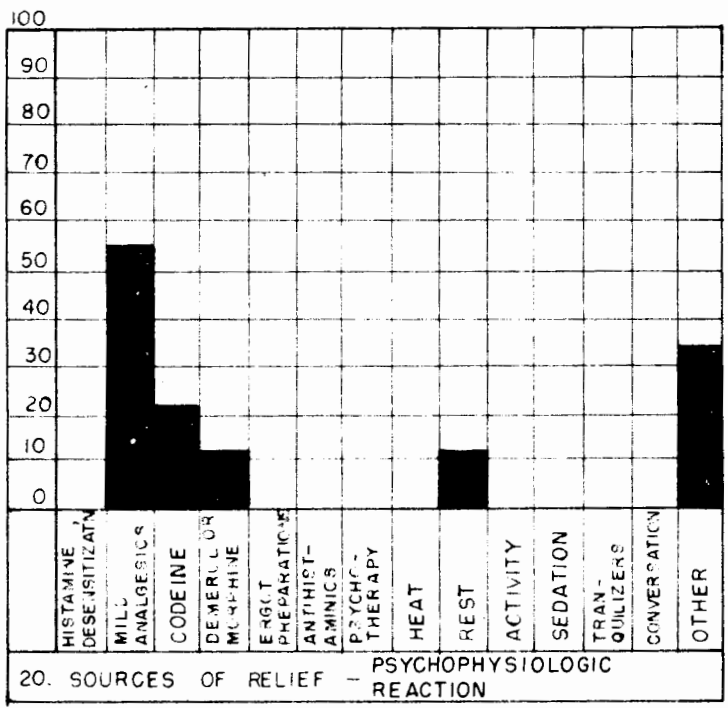
Past Medical History: Trauma was the most prominent factor with five patients sustaining injury to areas other than the head, two with head trauma, and three not reporting injury of any kind. As can be seen from these figures, some patients had multiple injuries. See Table X for a complete listing of past medical history by symptoms.

Sources of Relief: The mild, non-narcotic analgesics were most likely to give relief (5), and Codeine helped two patients.

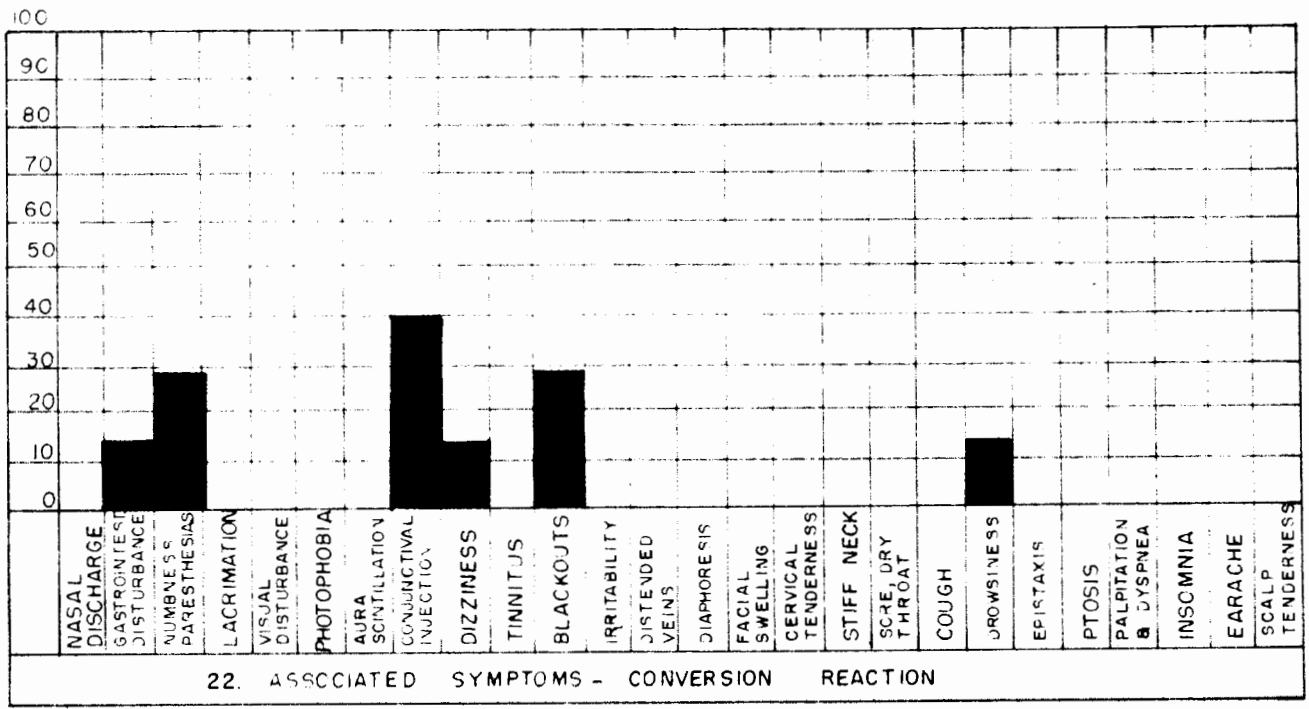
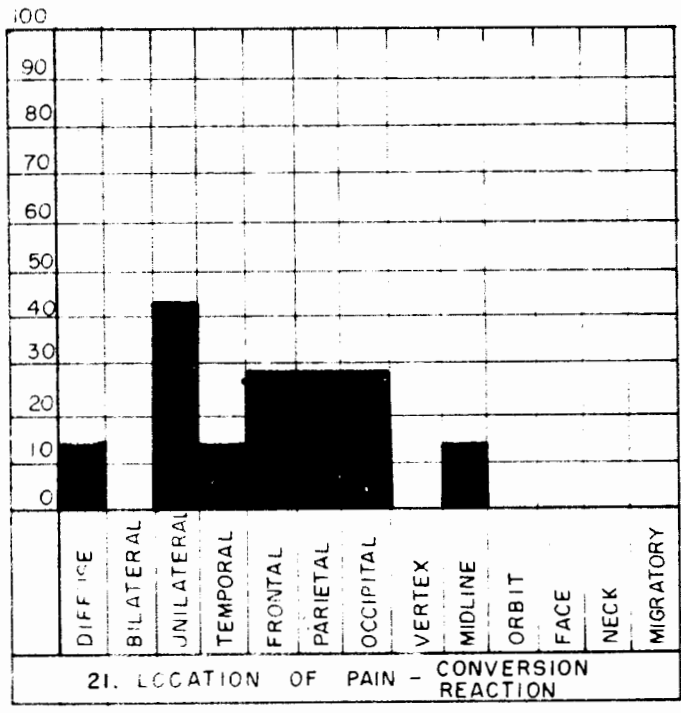
CONVERSION REACTION

Typical Picture: The typical patient in this group would have a unilateral headache involving the frontal, parietal or occipital regions, occurring several times weekly over a period of several years, lasting for one day. The headaches would be associated with reddened eyes, numbness, paresthesias, or black-outs and would be relieved by mild analgesics. The patient is likely to have suffered some form of trauma and would frequently have complained of gastro-intestinal illness, emotional disorders or functional cardiovascular complaints. Seven patients were diagnosed as Conversion reaction.

Localization: Unilateral headaches were reported by three patients, diffuse by one. The headaches involved the frontal



20. SOURCES OF RELIEF - PSYCHOPHYSIOLOGIC REACTION



area in two, parietal in two, occipital in two, temporal area in one and midline in one.

Associated Symptoms: Reddened eyes were mentioned by three patients, numbness or paresthesias by two, blackouts by two, dizziness by one and drowsiness by one.

Precipitating Causes: Five different factors were reported by the five patients in this group who had noted a precipitating cause. These diverse factors are listed in Table IV.

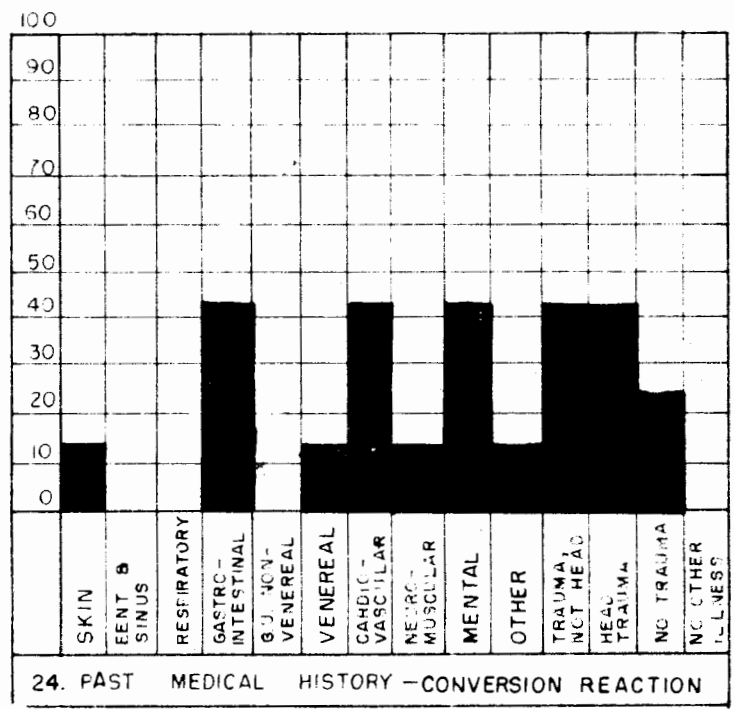
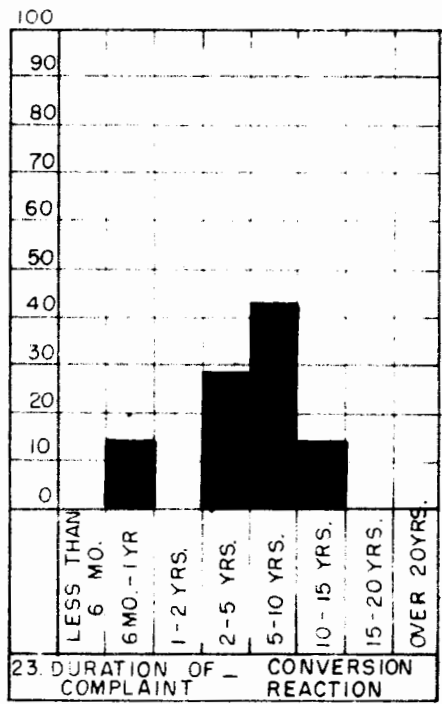
Duration of Complaint: This group had suffered from headaches for relatively long periods of time. Most of the patients had complained of headache for longer than two years (6). A patient who had had headaches for only four to five months in the bout for which he was hospitalized mentioned having had headaches for several years when he was a child. Five patients had had headaches for from two to ten years.

Frequency of Attacks: One patient had headaches daily and one had several per week. One had several a year.

Duration of Attacks: Approximately one day was reported as the duration of attacks in two patients, and from two to five days in one.

Onset of Attacks: Time of onset was variable in this group.

Family History: One patient reported a positive family history.



Psychiatric Evaluation: The most common characteristics found in the four patients who were evaluated were passiveness and dependency (3), hostility or aggression (3), and immaturity (2).

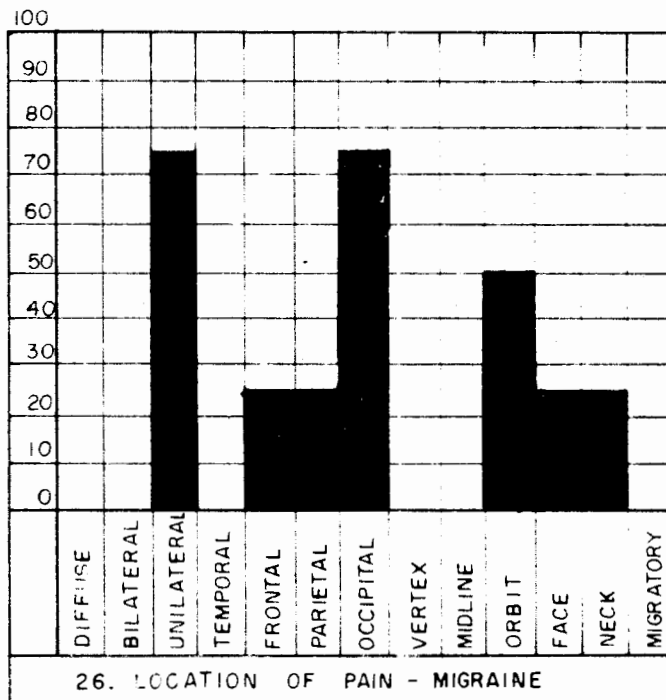
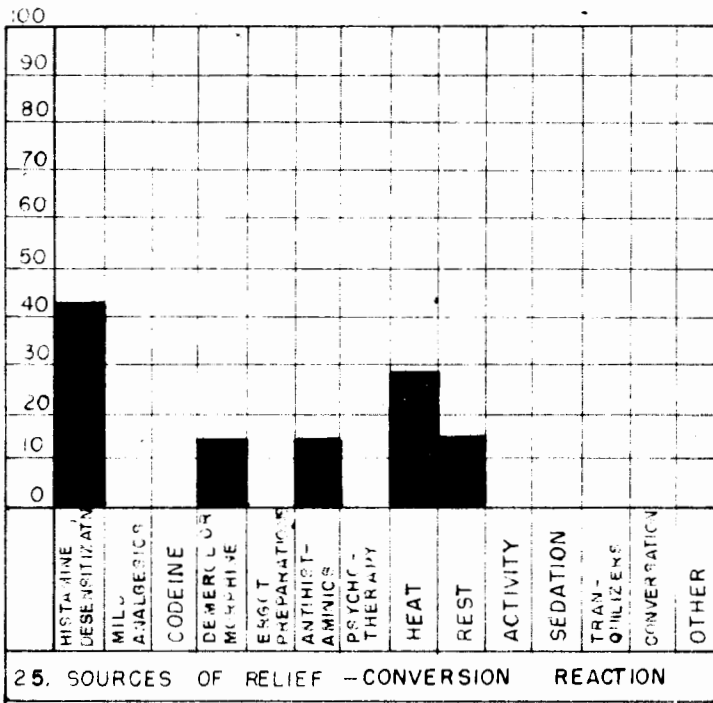
Past Medical History: The trauma categories were the largest single groups in the past medical histories of the people with conversion reactions. Head trauma was suffered by three and trauma to other body areas by three.* Two of this group did not report any trauma. Three patients had experienced gastrointestinal distress, three had had cardio-vascular complaints including one diagnosed as neurocirculatory asthenia and one having pre-cordial pain diagnosed as a conversion reaction. Three had been treated for "nervous conditions."

Sources of Relief: Relief was most often obtained by mild non-narcotic analgesics (3) or by rest (2).

MIGRAINE

Typical Picture: This group characteristically had unilateral headaches involving the occiput, accompanied by nausea, vomiting and visual disturbances, and relieved by Cafergot. The headaches would occur up to several times weekly and would last from one to five days. The previous medical record of these patients would be extensive and would involve skin complaints, ulcers and anxiety reactions predominantly.

* One patient suffered a groin injury, minor combat injury, and two auto wrecks between 1948 and 1952.



Psychological testing would reveal anxiety, immaturity and depression. Migraine was diagnosed in only four patients.

Localization: The patients described their headaches as being unilateral (3) and occipital (3) or involving the orbit (2).

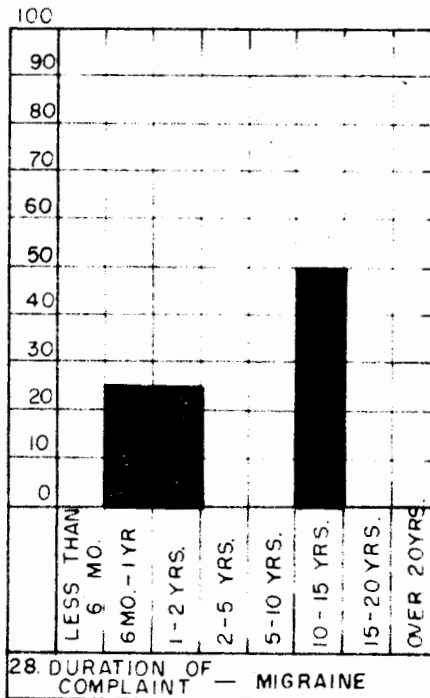
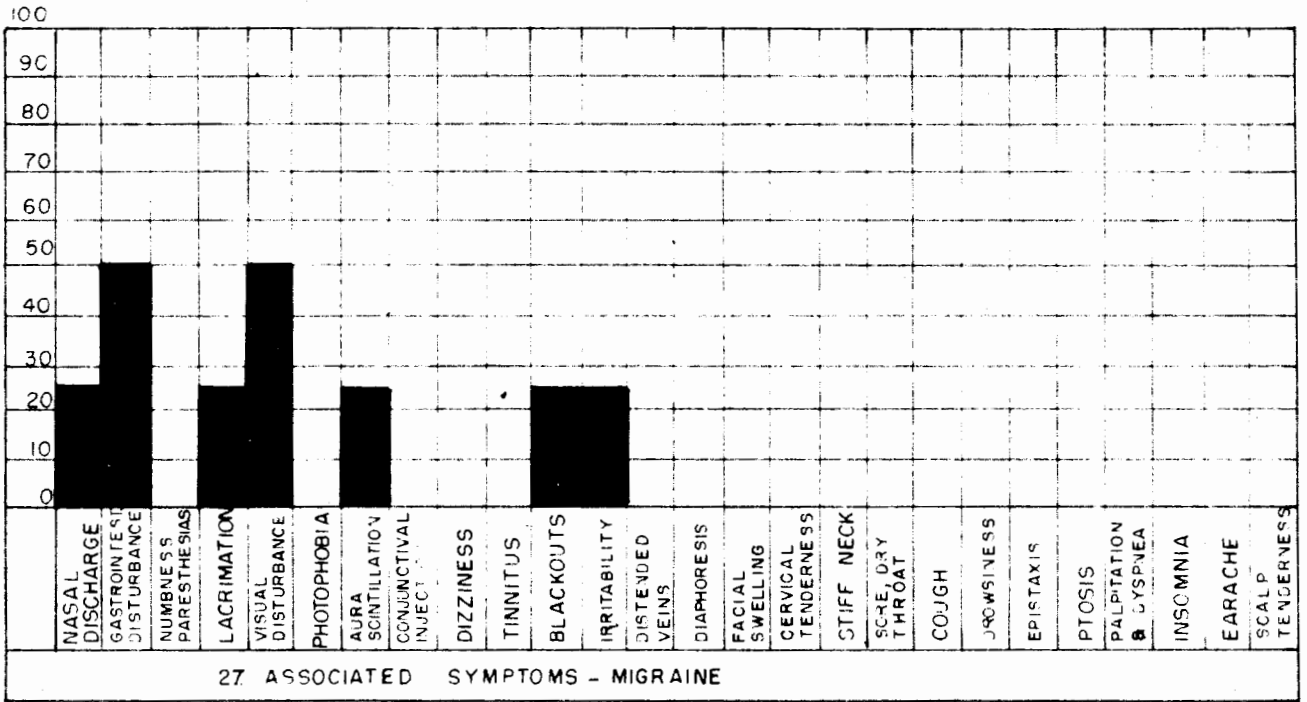
Associated Symptoms: Nausea, vomiting or other gastro-intestinal distress were considered associated symptoms by two patients, and visual disturbances consisting of blurring or diplopia were reported by two. Scintillation or aura was experienced by one and lacrimation by one.

Precipitating Causes: Two of the patients with migraine reported precipitating factors. One felt that marital discord and nervousness brought on his headaches and the other related them to stress and fatigue.

Duration of Complaint: Two of the patients in this group had had headaches for over ten years and two for less than two years.

Frequency of Attacks: One patient reported that his headaches were daily in occurrence and another that they were present several times weekly.

Duration of Attacks: One patient had headaches lasting from three to twelve hours and another had headaches lasting up to five days.



Onset of Attacks: Headaches awakening him from sleep were reported by one patient and another had headaches beginning only in the evening.

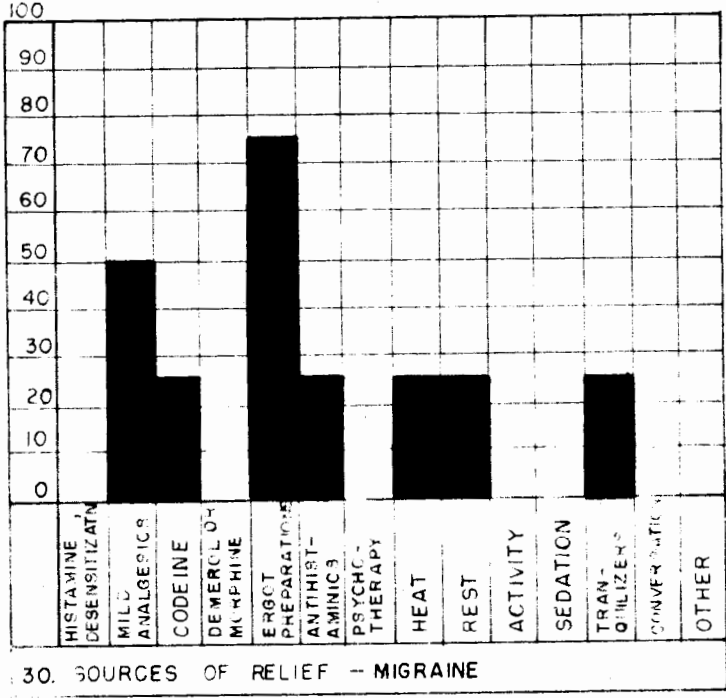
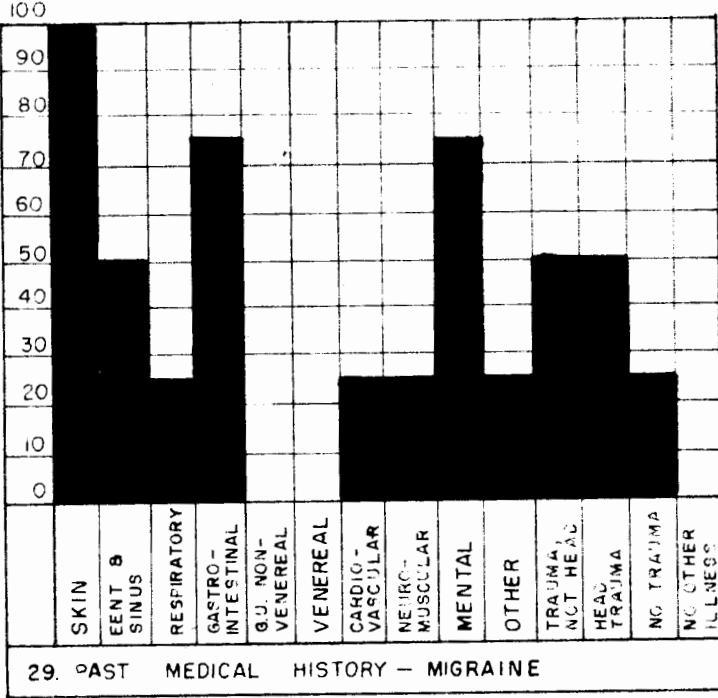
Family history: None of these patients had a family history for migraine headaches.

Psychiatric Evaluation: The single patient who was evaluated from a psychiatric point of view was described as anxious, immature and depressed.

Past Medical History: A variety of illnesses were prominent in the background of these migraine sufferers. Skin disorders were present in all four. One patient reported no trauma, but two had trauma to the body, and two had head injuries. Three patients had had ulcers, two reported acute anxiety reactions and one had experienced the DT's. Two patients had had EENT or sinus complaints*,

Sources of Relief: Cafergot gave relief to three of these people.

- * One migraine sufferer less than fifty years of age had a lengthy history which included a fractured wrist in childhood, fractured ribs as an adult, and a head injury in service. He had had a perforated ulcer necessitating a sub-total gastric resection and later developed an incisional hernia with a sub-hepatic abscess. He suffered from acute and chronic pancreatitis and had the DT's. He had had his strabismus corrected by operation. He had suffered from otitis media, pneumonitis, and bronchial asthma, and at the time of admission had complained of headaches for twelve years.



SOMATIZATION REACTION

Typical picture: A typical picture can hardly be drawn from only two patients. The only truly common factors in these two patients were that they both had headaches which were bilateral in distribution, and they were both evaluated as immature and anxious.

Because there were only two patients in this group each will be described separately. One patient said his headaches were occipital, radiating, one-sided or sometimes bilateral and were a bursting pain brought on by tension. They had been present for eight years and relief was obtained from sedation and mild analgesics. The other reported that his headaches were bifrontal radiating over the vertex and also had been present for eight years. He experienced numbness of body and blackouts associated with his headaches, but noted no precipitating causes. His headaches sometimes awakened him at night. Relief was obtained from cafergot or mild analgesics.

ETIOLOGY UNDETERMINED

The official terminology for this group might suggest that the other groups represent precise entities and that this group is completely without diagnostic characteristics. This is not true. In several of the cases in this group, a tentative diagnosis had been made. In others, circumstances necessitated discontinuation of investigation of the patient before a more

nearly accurate label could be attached. There was a question of tension as a source of the headache in one, anxiety in another, functional causes in a third and anoxia in a fourth.

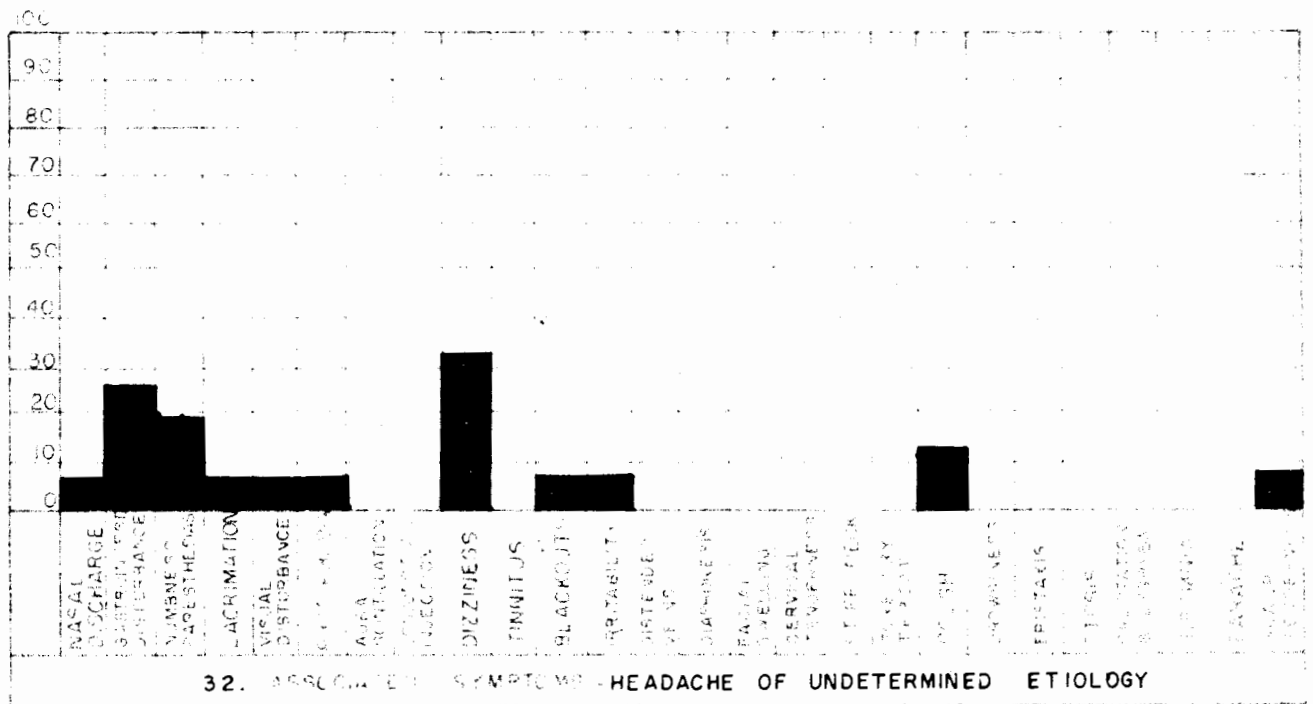
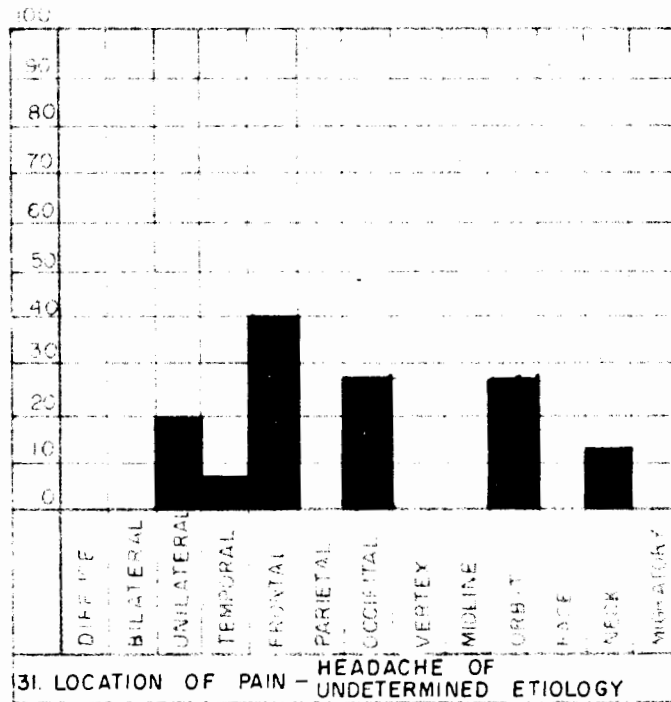
Typical Picture: These patients complained of headaches involving the frontal area, the occiput and the eye. They experienced associated dizziness, nausea or vomiting, and numbness of the hands or feet. Their headaches were frequent, at least several times weekly lasting approximately one day and had been present as a symptom for five to ten years. Their past medical histories were varied, with complaints in all of the major areas including trauma.

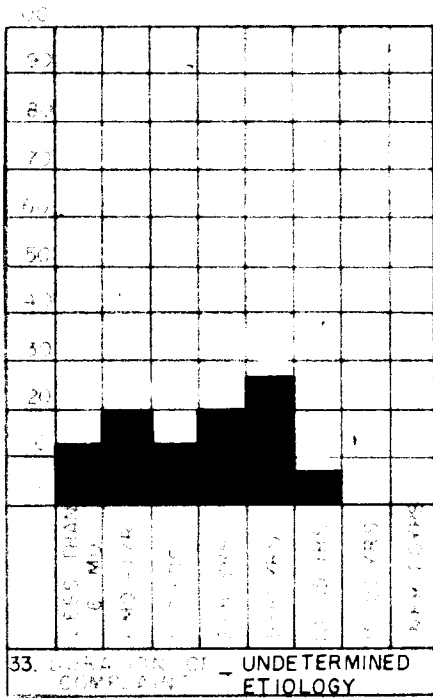
Localization: Three patients described their headaches as unilateral in distribution. Six said that the frontal region was involved, four the occipital, and four the area around the eye.

Associated Symptoms: Nausea and vomiting were associated with headache in four patients, almost as frequently as dizziness mentioned by five. Three patients complained of numbness or paresthesias.

Precipitating Causes: The five patients who reported these factors mentioned specific forms of stress as noted in Table IV.

Duration of Complaint: The length of time that these patients had complained of headache varied and no pattern was established.





33. QUANTIFICATION OF COMPLAINT - UNDETERMINED ETIOLOGY

Frequency of Attacks: These patients had headaches at least several times weekly. Two reported that they had headaches which were nearly constant.

Duration of Attacks: The majority of these patients had headaches of less than one day's duration.

Onset of Attacks: No definite time of day was implicated in these headaches.

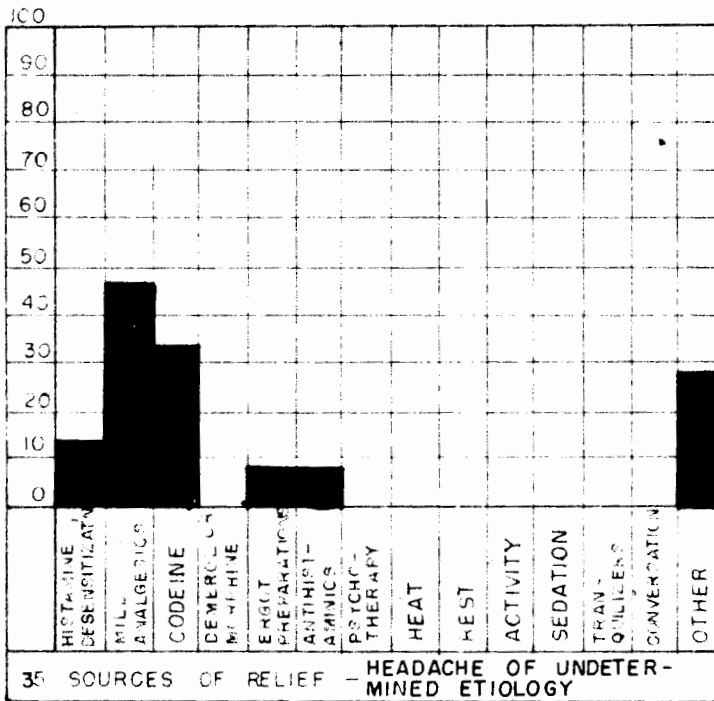
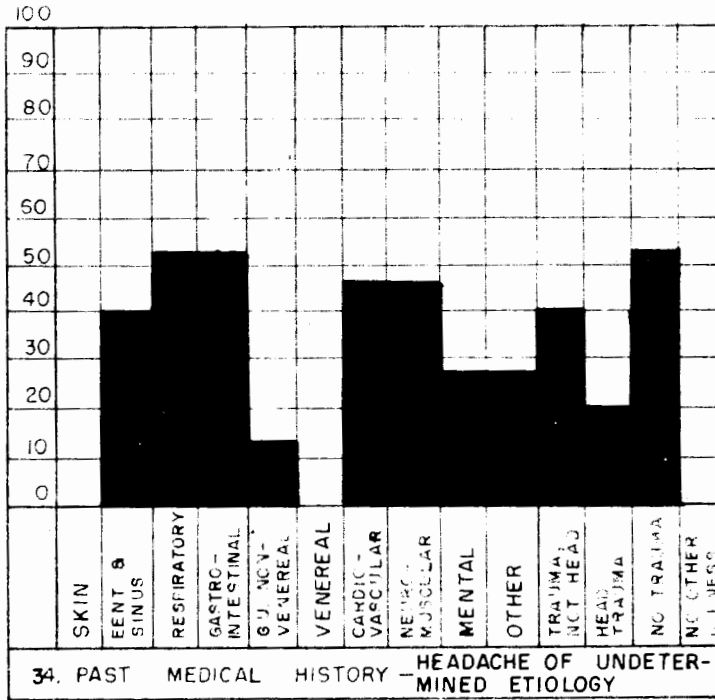
Psychiatric Evaluation: These patients were thought to be anxious (2), depressed (1) and to have schizoid tendencies (1). Only four had been evaluated.

Past Medical History: Respiratory complaints (8), cardio-vascular illness (8), Neuromuscular ailments (7), and trauma (7) were the most frequent groups reported. Six patients had trauma to areas other than their heads, three had head trauma, and eight patients had no trauma at all. Six patients reported ENT complaints, four had emotional illnesses and two had had genitro-urinary distress.

Sources of Relief: The mild analgesics were effective in bringing relief to seven and five were helped by codeine. Other sources of relief may be found in Table XI.

MISCELLANEOUS

The miscellaneous group included seven patients whose headaches were diagnosed but which did not fit into the other categories.



In this group was a patient who had had cephalgia due to allergy to alcohol for five years. His headaches were associated with nausea and vomiting and were relieved by mild analgesics. His previous medical history included being hit by a car, venereal disease several times, ulcers, and anxiety reaction. In a Psychiatric evaluation he was found to have anxiety, and little aggressive drive. He was dependent, meek and inadequate.

Another patient in this group was thought to have a hypochondriacal reaction. His headaches had been present for over twenty-five years and were frontal and throbbing, associated with anorexia, nausea and vomiting, an aura and distended veins. He obtained little relief from empirin, psychotherapy and sedation. Previously, he had suffered from a head injury, gallbladder complaints, ulcer, paroxysmal auricular fibrillation and chest pain, sinusitis, a conversion reaction and osteoarthritis.

One patient had myositis of the left trapezius muscle with secondary cephalgia which was associated with difficulty in moving the neck. The headache was described as almost constant for three to four months and kept the patient awake at night. It was not relieved by aspirin, sedamyl*, or physiotherapy. He had previously had an anxiety reaction.

* Acetylbromdiethylacetylcarbamid

Another patient suffered from cephalgia secondary to cervical myalgia and tension. The headaches were localized in the right posterior cervical area extending over the head to the eye, associated with vomiting and neck ache, abdominal distress, and blurring vision. The patient reported that fried foods, "a full meal" or financial worries would bring on pain. Codeine gave the most satisfactory relief. He had previously had dysentery, a back injury, sinusitis, a cornpicker accident involving his hand, fusion of a lumbosacral joint, a neck injury, psychophysiologic gastro-intestinal reaction, and sciatica.

Headache had been present for ten years in one patient and had variously been diagnosed as histaminic cephalgia, tension headache, and anxiety reaction. The pain was described as migratory and associated with sore throat. Histamine desensitization had been successful for one and one-half years at the time he was dismissed from treatment.

A diagnosis of headache secondary to coryza was applied to one patient. He had right sided headaches precipitated by heat or cold, accompanied by nausea and vomiting, sore throat, and earache. His symptoms were somewhat relieved by ~~empirin~~ aspirin with codeine.

Cephalgia associated with nasal congestion, allergy and trauma to the nose was the diagnosis in one patient. He had

complained of headache for ten years, following trauma to his nose. He was treated by sub-mucous resection and allergy desensitization with good results. His past history revealed nervousness, diarrhea, and stomach distress for which he had a ten percent service connected disability for psychoneurosis; hypertension; anxiety reaction; diabetes; myocardial ischemia; chronic ulcerative colitis; and arteriosclerosis heart disease, all prior to age forty-two.

III Conclusions

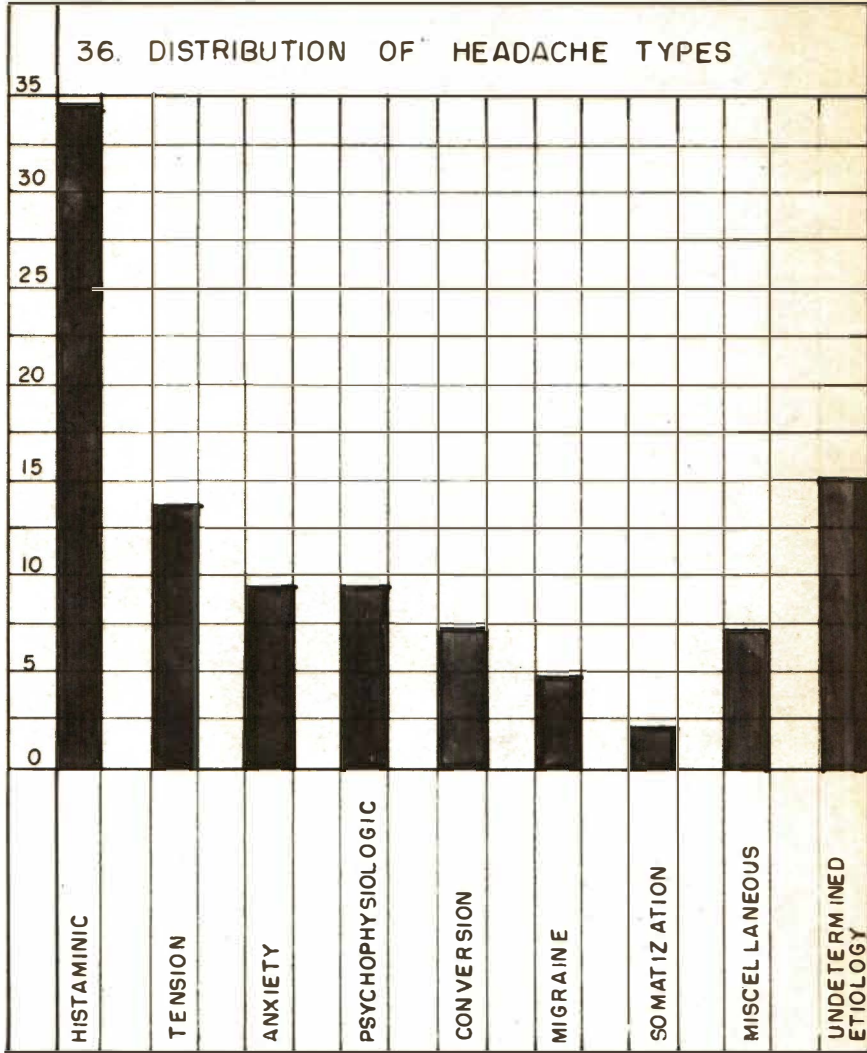
Distribution: The relatively large number of histaminic headaches diagnosed in this series confirmed the observation of Hansel that histaminic cephalgia is more often diagnosed by Otolaryngologists than by Internists. The treatment of this type headache is in the hands of the Otolaryngologists at OVAH and was for the most part successful in the patients on whom it was tried. Wolff stated that histaminic cephalgia was relatively rare and would account for only a few patients in any series, but his observations were limited to those patients who exhibited all of the characteristics of histaminic cephalgia, not including those who varied from the typical as did some in the series presented here.

Tension headache is often considered to be the most common form of headache. It was not in this series, but this form of headache is usually mild and is rarely a cause for hospital evaluation.

Headache is a frequent complaint in many psychoneurotic states and was so considered in the Anxiety Reaction, Psychophysiology Reaction, Conversion Reaction and Somatization Reaction Groups. Alexander cites numerous examples of patients developing headache when involved in emotional conflict.

Migraine is estimated to make up approximately eight percent of headaches when large numbers of patients are investigated. It accounted for only four percent of this study.

36. DISTRIBUTION OF HEADACHE TYPES

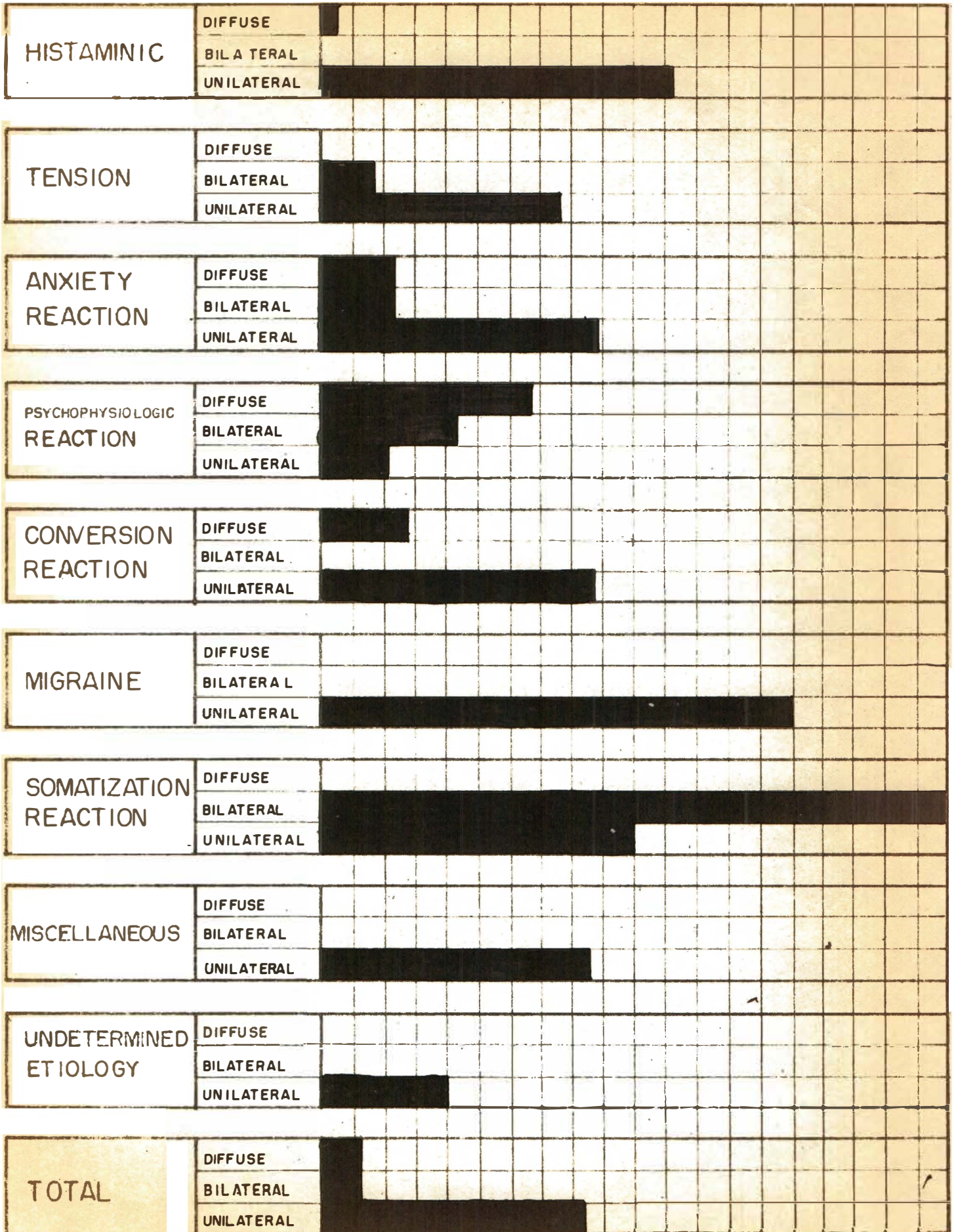


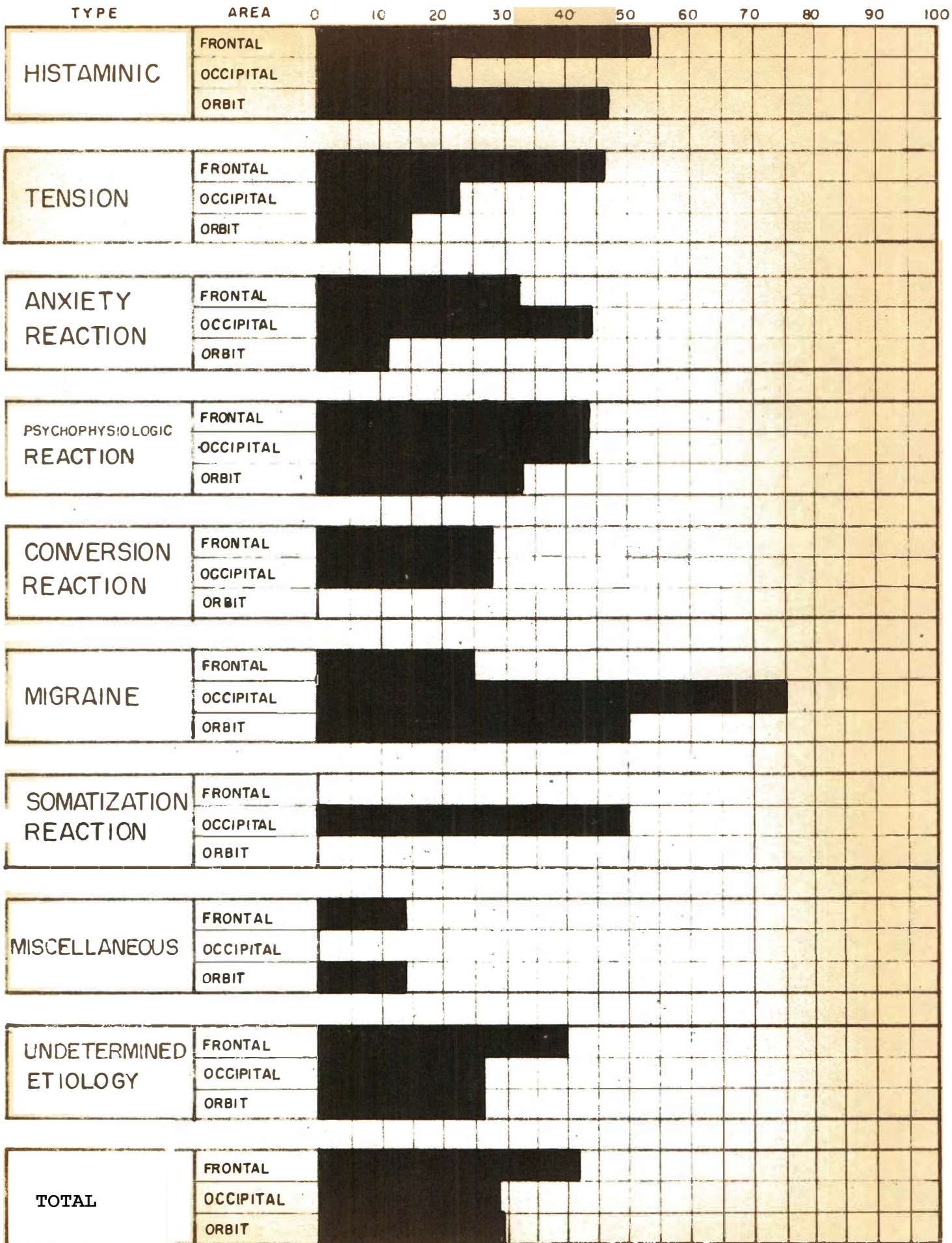
A more nearly representative proportion of headache types might have been indicated if there had not been such a large group in which the etiology had, for reasons previously stated, been undetermined. Combined with the Miscellaneous group which was made up of diagnoses which occurred only once in the series, these two groups made up nearly one-fourth of the study. Within the Miscellaneous group were two patients in which myalgia or myositis were factors. Hamilton suggests that myositis is psychogenic or is associated with psychiatric disorders.

Localization: In all groups except the Psychophysiologic Reaction and Somatization Reaction, unilateral headaches were most frequent, and even in the latter group one patient described his pain as being usually bilateral but sometimes unilateral. Bilateral headaches were prominent in the Psychophysiologic Reactions but diffuse pain was more the rule in this group.

The frontal, occipital and orbital areas were most often involved in the headaches in this series. Patients with Histaminic Cephalgia were most likely to have pain in the frontal and orbital regions. Those with Tension headache complained of frontal, occipital and neck pain. Patients with Anxiety Reaction were most likely to have pain in the frontal, parietal and occipital regions. Those in the Psychophysiologic Reaction group complained of the frontal, occipital and orbital pain but also had localization at the vertex. The Conversion Reaction group followed a pattern of

0 10 20 30 40 50 60 70 80 90 100





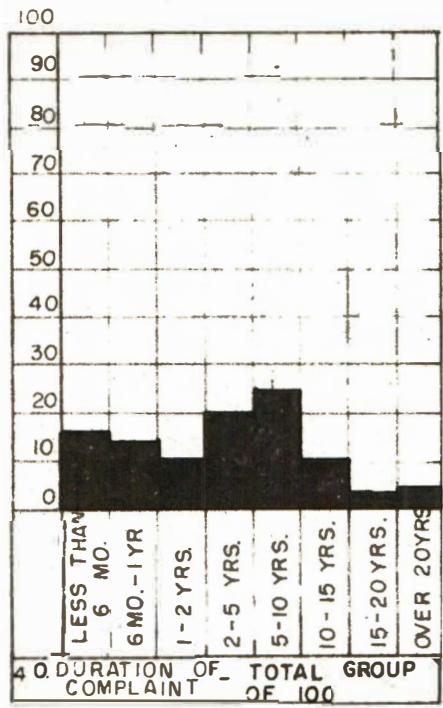
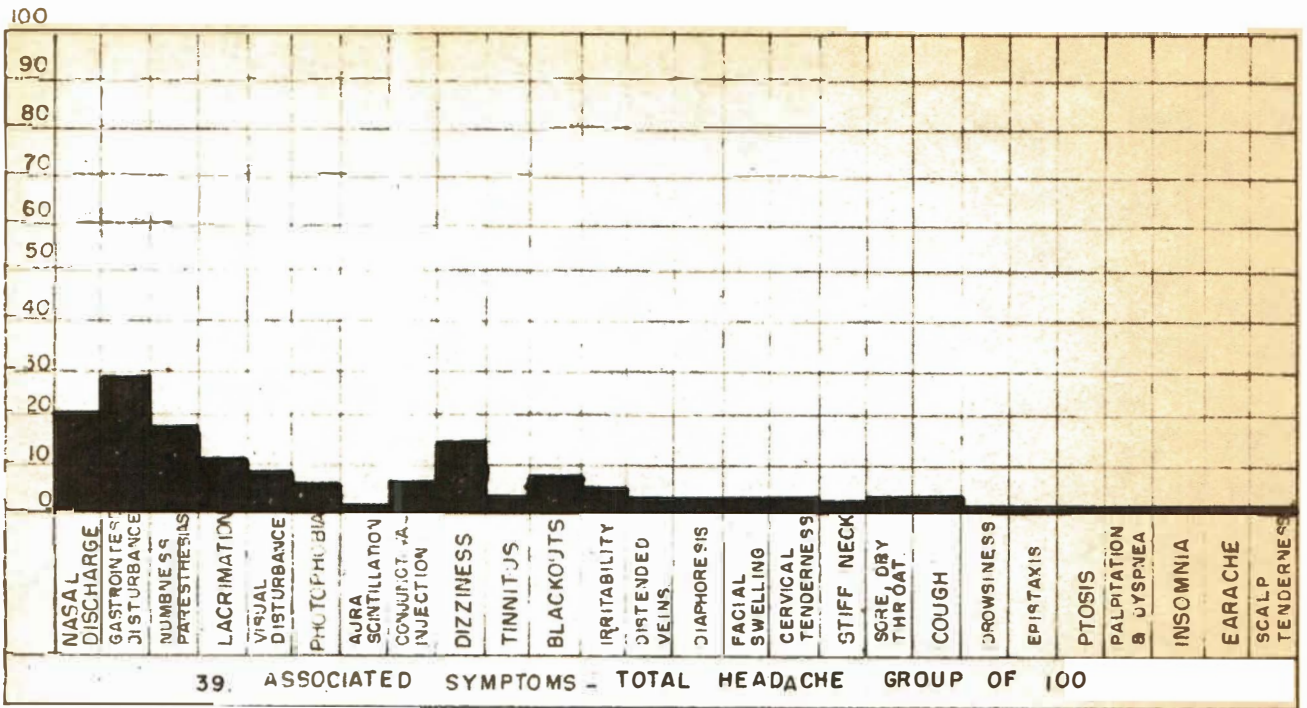
38. LOCATION OF PAIN AREA

frontal, parietal and occipital pain. Headache was localized to the occiput and the orbital regions in the Migraine group. There was no characteristic localization in the Somatization Reactions nor in the Miscellaneous group. In the headaches of Undetermined Etiology, frontal, parietal and orbital distribution were most frequent.

Associated Symptoms: Nasal discharge or stuffiness, gastro-intestinal distress, numbness, paresthesia or weakness, dizziness and lacrimation were the most frequently mentioned associated symptoms in all groups. The prominence of various symptoms varied from one diagnostic group to another.

Nasal discharge or stuffiness is one of the classical symptoms of the Histaminic type of headache, and was the most frequent associated symptom in this group. It was also common in the Tension Headache group and was reported by one Migraine patient.

Lacrimation was a prominent feature in the Histaminic headaches, and was not common in the other groups. Conjunctival injection was not as frequently noted by the Histaminic headache patients as might be expected, but was a frequent accompaniment of the Conversion Reaction headaches. Facial swelling was mentioned only by the patients with Histaminic Cephalgia and is a characteristic of the classical description of this syndrome.



Nausea and vomiting with a headache may only mean that the pain is severe because any severe pain may be accompanied by disturbance of gastric motility. It was the most common associated symptom in Psychophysiologic Reaction and Tension Headache and was prominent in Migraine and in headaches of Undetermined Etiology. It was also frequent in the patients diagnosed as Histaminic Cephalgia. According to classical descriptions, however, nausea and vomiting are not usual in Histaminic headache.

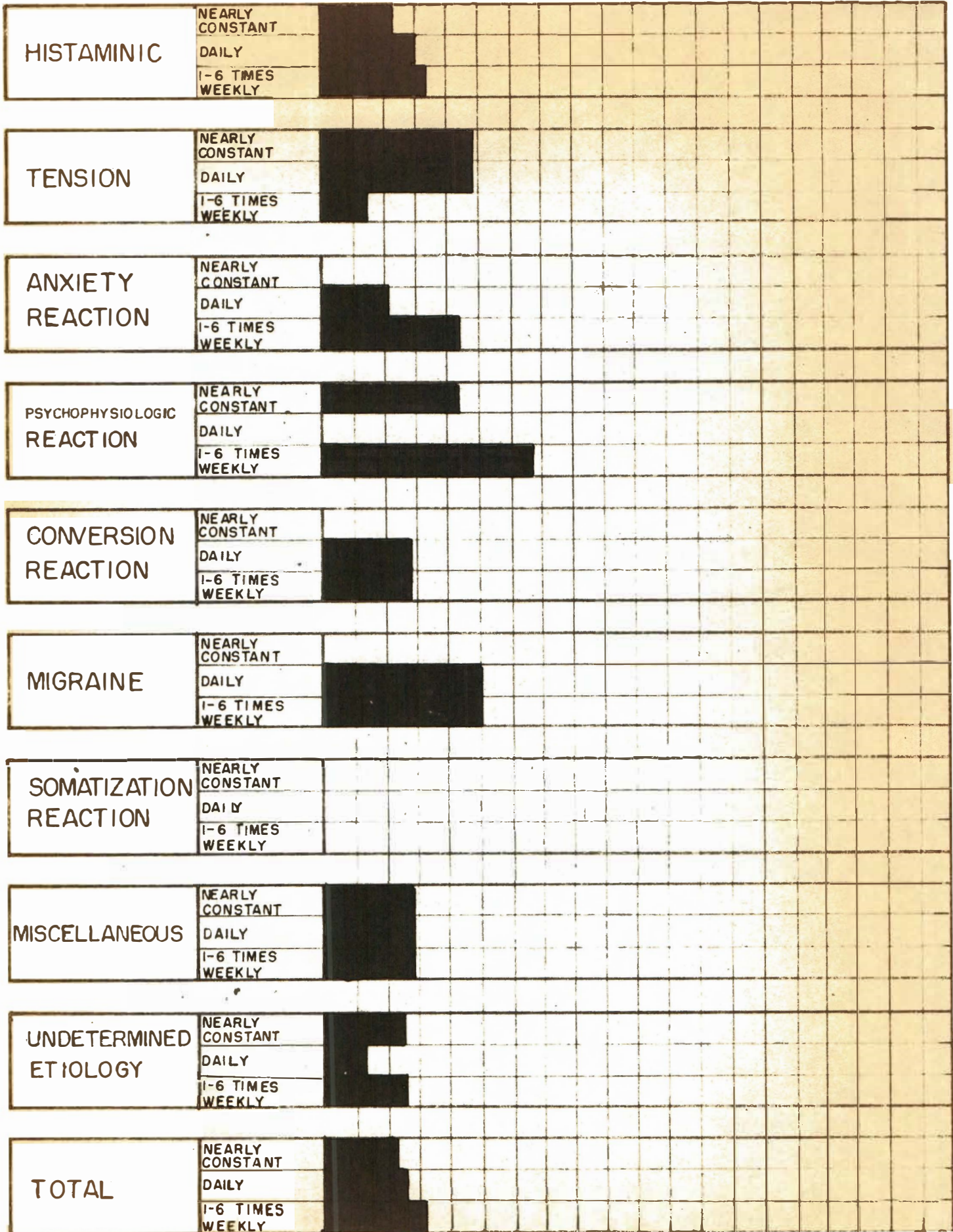
Numbness and paresthesias or weakness were most prominent in the Anxiety Reactions, Psychophysiologic Reactions, Conversion Reactions and Histaminic Cephalgia and may have represented a vascular disturbance or resulted from mild hyperventilation.

Dizziness was most frequently associated with the headaches of Undetermined Etiology but was also a feature of the Psychophysiologic Reactions and Tension headaches.

Visual disturbances were reported in other groups but were numerically important only in the Migraine sufferers.

Precipitating Causes: Thirty-nine different specific factors were implicated by patients in this series as being possible precipitating causes in their headache. These thirty-nine factors can be combined into one word - stress - either emotional or physical.

0 10 20 30 40 50 60 70 80 90 100



41. FREQUENCY OF ATTACKS

Duration of Complaint: Headache had been a persistent complaint for the majority of the patients in this group, with the most frequently reported durations being two to ten years. A smaller number reported headaches of less than six months duration, and these were primarily from the Tension headache group. Half of the Migraine patients had had headaches for from ten to fifteen years.

Frequency of Attacks: The Histaminic headache group was the only one which reported that their headaches were likely to come in clusters with symptom-free periods between. This is in keeping with the observations of Robinson, and may be considered as one of the characteristic features of this headache.

In all groups headaches were frequent in occurrence, being either daily, constant or several times weekly in the majority of cases.

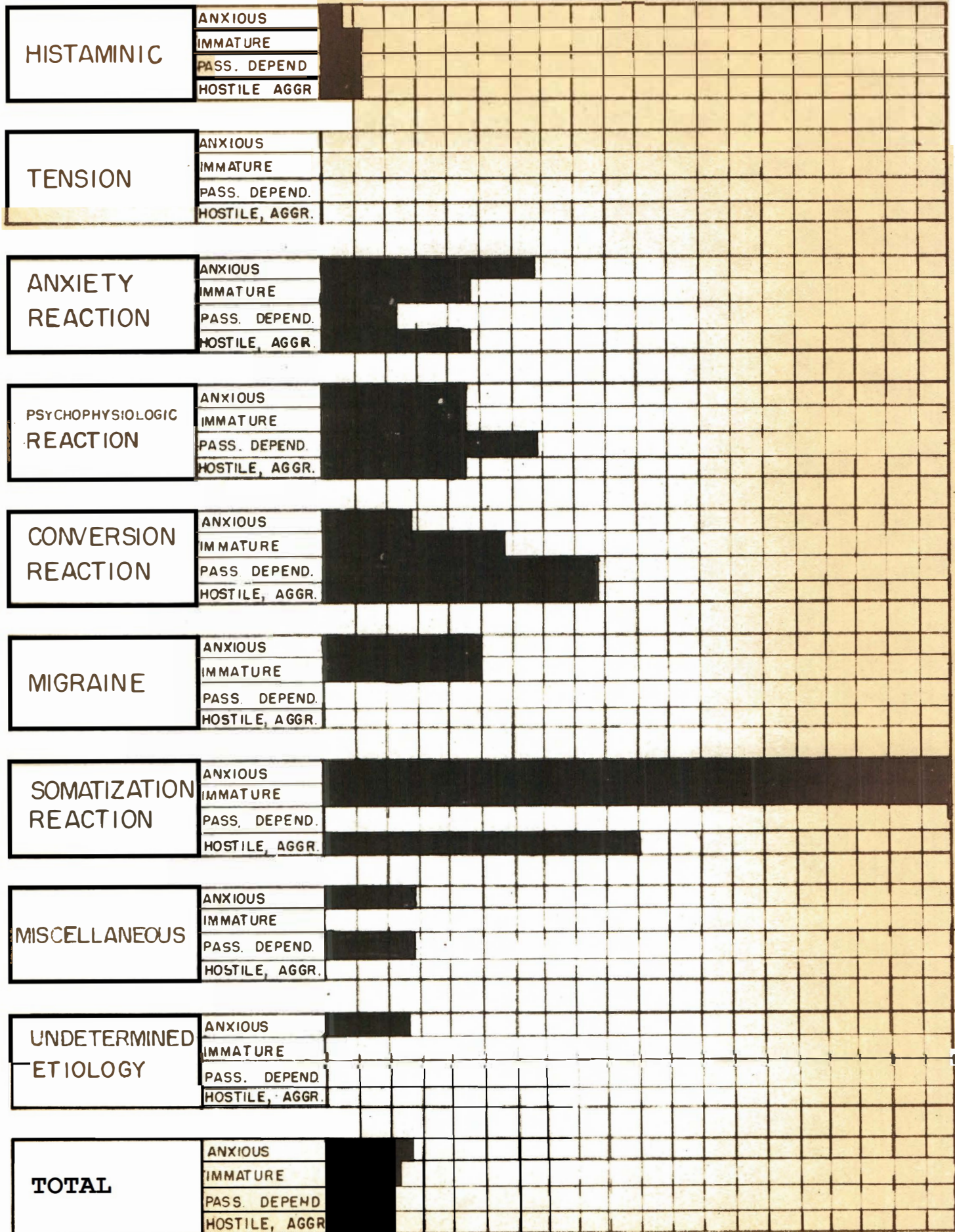
Duration of Attacks: Short headaches were the rule in all classifications, with less than three hours duration occurring most frequently, and a slightly smaller number in the less than twelve hours period. A few patients in all groups other than Tension Headache and Somatization Reaction reported headaches which lasted for several days.

Onset of Attacks: In the Histaminic Cephalgia group, during the night or while sleeping, or on arising, were frequent times for headaches to begin. This is often considered a

diagnostic factor in this type of headache. Horton described Histaminic headaches as tending "to awaken the patient at night one to two hours after he has gone to sleep." There was no characteristic pattern of onset in other headache groups.

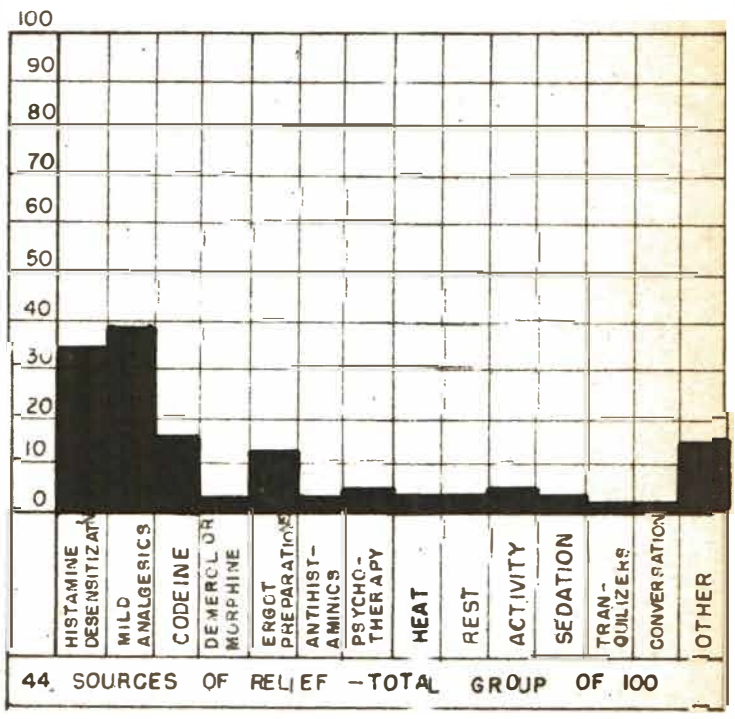
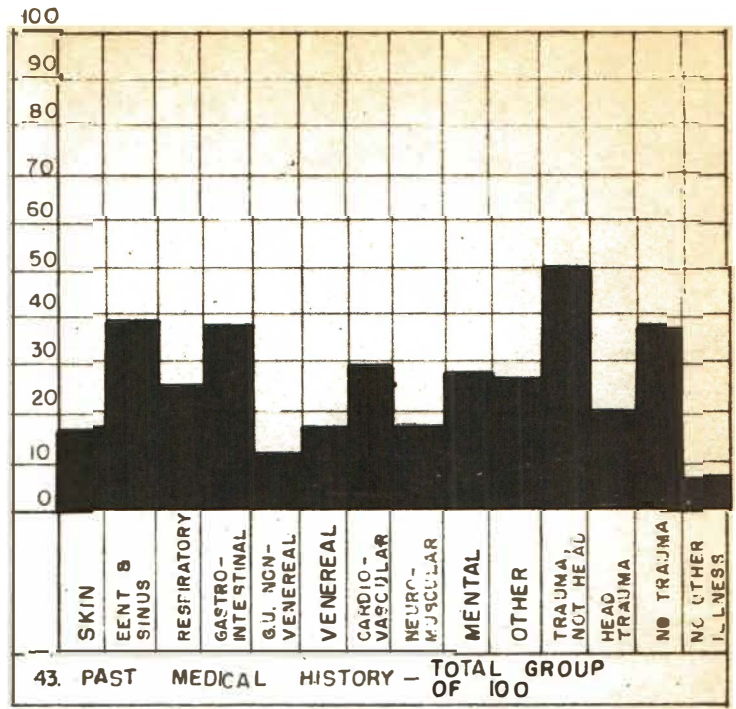
Family History: A positive family history of headache is considered part of the symptom complex in Migraine headaches but was not reported in the records of the Migraine patients in this series. It is not part of the Histaminic headache pattern and a negative family history is the rule in Histaminic headaches. However, in this series, four patients in the Histaminic group noted that other members of their families had similar headaches. One patient in the Conversion Reaction group reported a positive family history.

Psychiatric Evaluation: Twenty-six of the patients in this series were evaluated by psychiatrists or had psychological testing. The most common findings were anxiety, immaturity, dependence, and aggression. The patients suffering from Anxiety Reaction showed anxiety, immaturity, aggression and schizoid tendencies. Those with a Psychophysiologic Reaction were frequently dependent, but also showed anxiety, immaturity and aggression. The group with Conversion Reactions were dependent, aggressive, immature and anxious. The Somatization Reaction patients were anxious and immature.



Past Medical History: Trauma was the most striking feature of the past medical histories of the headache patients as a whole and was the most prominent category in all except the Migraine and Etiology Undetermined groups. Head trauma in the past histories was also frequent, but none of the headaches in this series were diagnosed as post-traumatic. According to Moench, headache following cranial trauma is more frequent in patients who had nervous and neurotic symptoms before the injury. The high incidence of fracture and other forms of injury within the headache groups may be an indication of underlying anxiety, since as Hamilton states, people under emotional stress are more liable to fractures. The patients diagnosed as having Anxiety Reaction had the highest percentages of trauma in their past. The finding of a great deal of trauma, including fractures, in the past history of the patients with Histaminic Cephalgia would possibly be contrary to some of the observations of Dunbar. In her series of patients suffering from fracture, she found few who reported allergic histories. Allergy, and ear, eye, nose and throat complaints were among the most frequent illnesses, second to trauma, in the medical histories of the Histaminic group.

Gastro-intestinal distress would be expected in any group showing anxiety. Hamilton, quoting other observers, stated that "Underlying anxiety neurosis (is) a major factor in



the etiology of duodenal ulcer," and, "incidence of peptic ulcer and anxiety parallel each other." Gastro-intestinal illnesses were, therefore, surprisingly infrequent in the group diagnosed as Anxiety Reaction. They were prominent, however, in Tension headache, Conversion Reaction, Migraine and the Etiology Undetermined group.

Respiratory illnesses were notable in the Tension Headache group and those in which the Etiology had been undetermined.

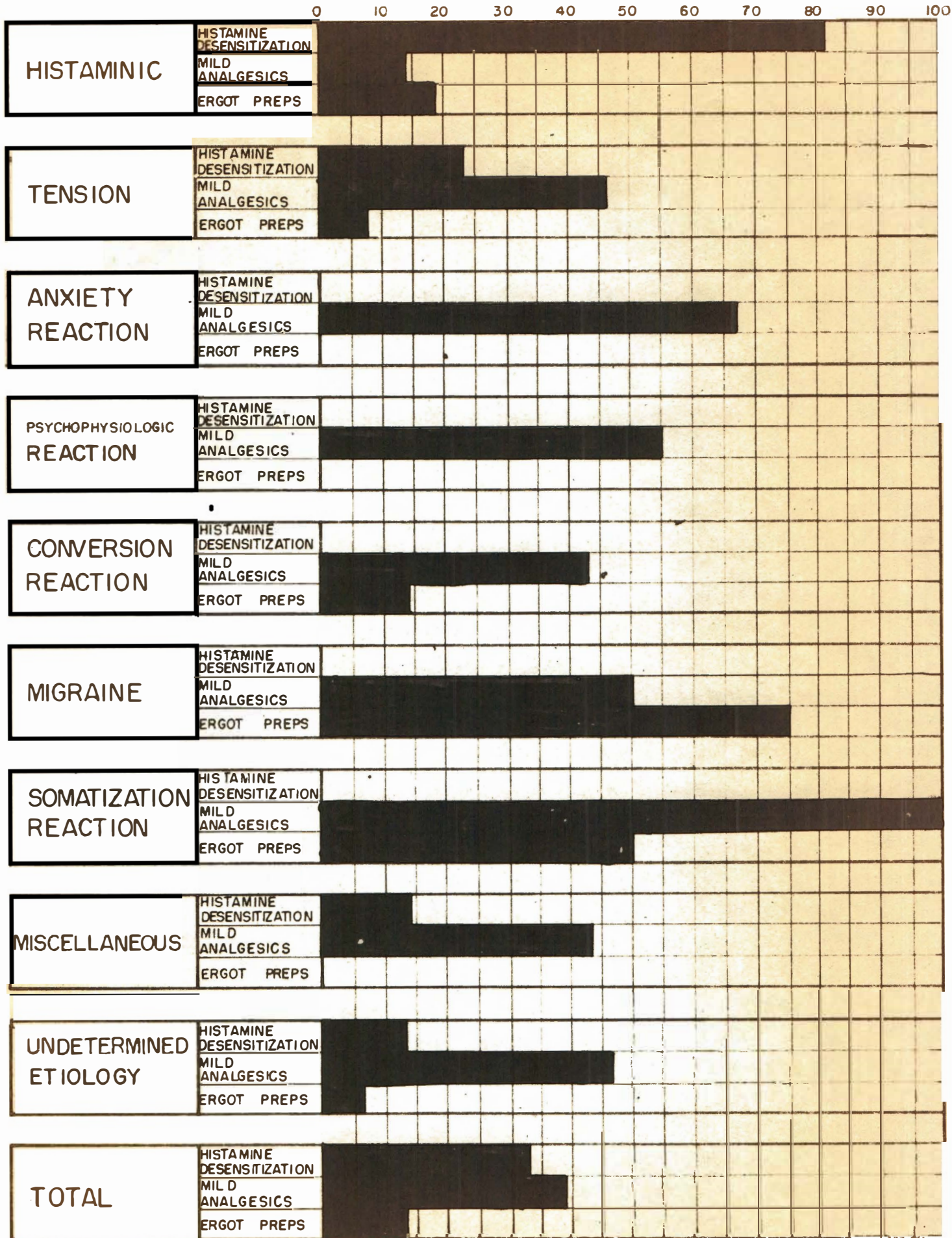
As previously mentioned, nasopharyngeal complaints were frequent in the Histaminic headache histories, but were also common in those designated Tension Headache. Migraine sufferers, and those with Anxiety Reaction also reported many EENT complaints including sinusitis and allergy.

Cardiovascular illness was most common in the patients with Conversion Reaction, Tension Headache, and with Etiology Undetermined.

A past history of emotional illness was most commonly found in Migraine, but was frequent in Conversion Reaction, Psychophysiologic Reaction and the group in which the Etiology was Undetermined. There was no recorded history of previous emotional illness in the Tension headache group.

Skin disorders were common only in the Migraine group.

Sources of Relief: The mild non-narcotic analgesics such as aspirin, APC and Empirin were effective in the largest



number of headaches, and were noted to give relief to some sufferers in every category. They were most effective in the Anxiety Reactions, Somatization Reactions, Psychophysiologic Reactions and Tension Headache.

The ergotamine preparations were most effective in the Migraine group but had some success in the Histaminic headaches, and in the Conversion Reactions.

A program of histamine desensitization was effective in over eighty-two percent of the patients diagnosed as having Histaminic Cephalgia. In addition to this group, however, three cases of Tension headache responded well to a course of histamine desensitization.

Codeine was used successfully to bring relief in some cases of Histaminic Cephalgia, Migraine, Psychophysiologic Reaction and in Headaches of Undetermined Etiology.

In headache, it would appear particularly necessary to investigate all phases of the patient's complaint in order to make an accurate diagnosis. Variations between some of the groups such as Anxiety Reaction and Tension Headache were small, but notable differences between Histaminic Cephalgia and the other groups would be found by making a complete investigation including a thorough review of past medical problems.

IV Summary

The case records of one hundred male patients whose chief complaint was headache at Omaha Veterans Administration Hospital were carefully studied to determine the clinical picture presented and the significant physical and emotional events in their history. Clinical descriptions believed typical of the diagnostic groups were formulated in Histaminic Cephalgia, Tension Headache, Anxiety Reaction, Psychophysiologic Reaction, Conversion Reaction, Migraine, Somatization Reaction, Miscellaneous, and headaches with Etiology Undetermined.

The patient with a diagnosis of Histaminic Cephalgia most frequently complained of the following: Headache which started during the night, involving the frontal and orbital regions. He would have associated nasal discharge or stuffiness and gastro-intestinal distress. He would have had headaches for approximately five years and would have noted that the headaches seemed to come in groups or clusters with symptom-free intervals between. Relief would have been from histamine desensitization. His past medical history would have included Ear, Eye, Nose and Throat complaints, sinusitis or allergy and he would have reported at least one fracture.

In the Tension Headache group, the history of headache would be less prolonged, but the pain would be nearly constant in the daytime. The distress would be unilateral, involving the

frontal areas, the occiput and the neck, and would be accompanied by epigastric distress, dizziness or nasal discharge. He would be relieved by mild analgesics. The past medical history would include gastro-intestinal complaints, injury, sinusitis and respiratory illness.

With a diagnosis of Anxiety Reaction, the patient would have a unilateral headache involving the occipital, parietal and frontal areas. His headaches would have been present for several years and would be relieved by mild non-narcotic analgesics. Stress and nervousness would precipitate headaches and they would occur as often as several times a week. Numbness, paresthesias or blackouts would be associated symptoms. The patient would have had trauma and Ear, Eye, Nose and Throat complaints in his past history.

A patient in the Psychophysiological Reaction group would have a diffuse headache involving the frontal, orbital or occipital regions. The pain would be accompanied by nausea, vomiting or epigastric distress and would be relieved by mild analgesics. His past medical history would have included an episode of trauma.

With headache as part of a Conversion Reaction, the patient would complain of a unilateral headache involving the frontal, parietal or occipital regions which would recur several times weekly over a period of several years. His headaches would be associated with conjunctival injection, numbness, paresthesias

or blackouts and would be relieved by mild analgesics. The patient would have reported a history of injury and would also have had gastro-intestinal illness, emotional disorders, or functional cardiovascular disease.

In a patient with Migraine headache the pain would have been described as unilateral and occipital accompanied by nausea, vomiting and visual disturbances and relieved by the ergot preparations. The headache would occur up to several times weekly and would last from one to five days. His past medical history would have been extensive and would involve skin disorders, ulcers and anxiety reactions.

No typical picture could be drawn in the Somatization Reactions nor in the various cases in the Miscellaneous group.

The group marked Etiology Undetermined showed characteristics of all of the other major groups and if a complete examination had been possible in all of these cases, a definitive diagnosis would probably have been made.

The most striking features of all of the headaches in this series were that they tended to be unilateral in distribution and involving the frontal occipital and orbital regions: The past medical histories of the patients showed frequent episodes of trauma, gastro-intestinal disorders, and Ear, Eye, Nose and Throat complaints; and relief was most often obtained from non-narcotic mild analgesics.

BIBLIOGRAPHY

1. Alexander, Franz, *Psychosomatic Medicine*, N.Y., W. W. Norton Co., 1950, 54-80, 155-163
2. Alexander, Franz, and French, T.M., *Studies in Psychosomatic Medicine*, N.Y., W. W. Norton Co., 1950
3. Dunbar, Flanders, *Psychosomatic Diagnosis*, N.Y., Harper and Bros., 1948
4. Friedman, A.P., *Modern Headache Therapy*, St. Louis, C. V. Mosby, 1951
5. Friedman, A.P., and Brenner, Charles, *Psychological Mechanisms in Chronic Headache*, In: Wolff, H.G., and others, *Life Stress and Bodily Disease*, Balt., Williams and Wilkins, Co., 1950, p. 605.
6. Grinker, R.R., *Psychosomatic Research*, N.Y., W.W. Norton Co., 1953
7. Hamilton, Max, *Psychosomatics*, N.Y., John Wiley & Sons, 1955, 2-24, 45-48, 52-75, 127-133
8. Hansel, F.K., *Vascular Headaches and Related Phenomena*, *Trans. American Academy of Ophthalmology and Otolaryngology*, 57:447-464, 1953
9. Hilger, J.A., *Vascular Head and Neck Pain*, *Trans. American Academy of Ophthalmology and Otolaryngology*, 57:465-470
10. Horton, B.T., *Histaminic Cephalgia*, *J.A.M.A.* 160:468-469 (Feb 11) 1956
11. Marcussen, R.M., *Vascular Headache Experimentally Produced by Presentation of Pertinent Life Experiences*, In: Wolff, H.G., and others, *Life Stress and Bodily Disease*, Balt., Williams and Wilkins, Co. 1950, 1609-1614
12. Moench, L.G., *Headache*, Chicago, Year Book Pub. 1951, 13-52
13. Robinson, B.W., *Histaminic Cephalgia*, *Medicine*, Vol. 37, No. 2, May 1958, 161-178
14. Wolf, Stewart, and Wolff, H.G., *Headaches, Their Nature and Treatment*, Boston, Little, Brown and Co., 1953

15. Wolff, H.G., Headache and Other Head Pain, N.Y.,
Oxford University Press, 1948, 255-381, 420-426,
541-545, 584-622
16. Wolff, H.G., Stress and Disease, Springfield, Charles
C. Thomas, 1953, 57-64, 128-135

ACKNOWLEDGEMENTS

The author offers grateful acknowledgement to Dr. Jackson A. Smith for his invaluable advice and supervision in this study, and to his office staff; to Dr. Frank Majka and to the Medical Records Personnel at Omaha Veterans Administration Hospital for their assistance in obtaining the records for this study; and to the Library Staffs at University of Nebraska College of Medicine and Nebraska Psychiatric Institute for their aid in finding suitable reference material.

--Margaret H. Peterson--

APPENDIX

TABLE I

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Total
	Histamine	Tension	Anxiety Reaction	Psychophysiological Reaction	Conversion Reaction	Migraine	Somatization Reaction	Miscellaneous	Undetermined Etiology	
TYPES OF HEADACHES:	34	15	9	9	7	4	2	7	15	100

TABLE II

LOCATION:	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %
Diffuse	1--2.9%		1-11.1%	3-33.3%	1-14.3%					6
Bilateral		1--7.7%	1-11.1%	2-22.2%			2-100%			6
Unilateral	19-56.6%	5-38.4%	4-44.4%	1-11.1%	3-43.0%	3-75.0%	1--50%	3-43.0%	3-20.0%	42
Temporal	2--5.9%	2-15.4%		1-11.1%	1-14.3%				1--6.7%	7
Frontal	18-53.0%	6-46.1%	3-33.3%	4-44.4%	2-28.6%	1-25.0%		1-14.3%	6-40.0%	41
Parietal	4-11.8%	2-15.4%	2-22.2%	1-11.1%	2-28.6%	1-25.0%				12
Occipital	7-20.6%	3-23.1%	4-44.4%	4-44.4%	2-28.6%	3-75.0%	1--50%		4-26.7%	28
Vertex	2--5.9%	2-15.4%		2-22.2%			1--50%			7
Midline			1-11.1%		1-14.3%					2
Orbital	16-47.0%	2-15.4%	1-11.1%	3-33.3%		2-50.0%		1-14.3%	4-26.7%	29
Face	5-14.7%					1-25.0%				6
Neck	7-20.6%	3-23.1%	1-11.1%	1-11.1%		1-25.0%		1-14.3%	2-13.3%	16
Migratory								1-14.3%		1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Total
	Histamine	Tension	Anxiety Reaction	Psychophysiological Reaction	Conversion Reaction	Migraine	Somatization Reaction	Miscellaneous	Undetermined Etiology	
ASSOCIATED SYMPTOMS:	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	
Nasal Discharge	15-44.1%	3-23.1%				1-25.0%			1--6.7%	20
Nausea, Vomiting, Distress	8-23.5%	4-30.8%		5-55.6%	1-14.3%	2-50.0%		4-57.4%	4-26.7%	28
Numbness, Paresthesia, etc.	5-14.7%		3-33.3%	3-33.3%	2-28.6		1-50.0%		3-20.0%	17
Lacrimation	7-20.6%	1--7.7%	1-11.1%			1-25.0%			1--6.7%	11
Visual Disturbances	1--2.9%		1-11.1%	2-22.2%		2-50.0%		1-14.3%	1--6.7%	8
Photophobia	2--5.9%	1--7.7%		1-11.1%					1--6.7%	5
Scintillation or Aura						1-25.0%		1-14.3%		2
Conjunctival Injection	3--8.8%				3-40.3%					6
Dizziness	2--5.9%	3-23.1%	1-11.1%	2-22.2%	1-14.3%				5-33.3%	14
Tinnitus	2--5.9%			1-11.1%						3
Blackouts			2-22.2%	1-11.1%	2-28.6%	1-25.0%	1-50.0%		1--6.7%	8
Irritability			1-11.1%	2-22.2%		1-25.0%			1--6.7%	5
Distended Veins	2--5.9%							1-14.3%		3
Diaphoresis		1--7.7%	1-11.1%	1-11.1%						3
Facial Swelling	3--8.8%									3
Cervical Tenderness		1--7.7%	1-11.1%							2
Stiff Neck								2-28.6%		2
Sore, Dry Throat		1--7.7%						2-28.6%		3
Cough		1--7.7%							2-13.3%	3
Drowsiness					1-14.3%					1
Epistaxis	1--2.9%									1
Ptoxis		1--7.7%								1
Palpitation, Dyspnea		1--7.7%								1
Insomnia			1-11.1%							1
Earache								1-14.3%		1
Scalp Tenderness									1--6.7%	1

TABLE IV

	Histamine	Tension	Anxiety Reaction	Psychophysiological Reaction	Conversion Reaction	Migraine	Somatization Reaction	Miscellaneous	Undetermined Etiology	Total
PRECIPITATING CAUSES:	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	No. %	
Patients reporting cause	10-29.4%	9-69.2%	9-100%	7-77.8%	5-71.5%	2-50.0%	1-50.0%	2-28.6%	5-33.3%	50
Nervousness	3--8.8%		3-33.3%	2-22.2%	1-14.3%	1-25.0%				10
Stress, Worry, Tension	3--8.8%		2-22.2%	1-11.1%		1-25.0%	1-50.0%		2-13.3%	10
Worry over Health		1--7.7%								1
Hostility				1-11.1%						1
Excitement				1-11.1%						1
Intense Application to work									1--6.7%	1
Physical Exertion	1--2.9%	1--7.7%	1-11.1%	1-11.1%	1-14.3%					5
Stoop, Lean Forward	2--5.9%			2-22.2%						4
Arise from Sitting			1-11.1%							1
Lying Down	1--2.9%									1
Erect Posture	1--2.9%									1
Ext./Flex Neck		1--7.7%								1
Movement to left	1--2.9%									1
Fatigue or Overwork		1--7.7%				1-25.0%				2
Weather	1--2.9%									1
Damp Weather		1--7.7%								1
Cold/Cold Weather	1--2.9%	1--7.7%	1-11.1%							3
Warm Weather		2-15.4%			1-14.3%					3
Heat or Cold								1-14.3%		1
Wind Across Forehead					1-14.3%					1
Turbulent Childhood	1--2.9%									1
Strict Parents					1-14.3%					1

TABLE IV - CONTINUED

	Histamine	Tension	Anxiety Reaction	Psychophysiological Reaction	Conversion Reaction	Migraine	Somatization Reaction	Miscellaneous	Undetermined Etiology	Total
<u>PRECIPITATING CAUSES:</u>										
Family Discord			1-11.1%	3-33.3%		1-25.0%			1--6.7%	6
Working for Father					1-14.3%					1
Interpersonal Relations			1-11.1%							1
Approaching Marriage			1-11.1%							1
Divorce	1--2.9%									1
Family Responsibilities					1-14.3%					1
Purchase of Home			1-11.1%							1
Parent's Death			2-22.2%							2
Cousin's Death									1--6.7%	1
Financial Trouble				2-22.2%				1-14.3%	1--6.7%	4
Bad Dreams			1-11.1%							1
Crowds				1-11.1%						1
Reading	1--2.9%									1
Epigastric Distress		1--7.7%								1
Fried Foods								1-14.3%		1
Wearing Cap, Noise or Vibration			1-11.1%							1

TABLE VII

	Histamine	Tension	Anxiety Reaction	Psychophysiologic Reaction	Conversion Reaction	Migraine	Somatization Reaction	Miscellaneous	Undetermined Etiology	Total
<u>DURATION OF INDIVIDUAL ATTACKS:</u>										
Less than 3 hours	7-20.6%	2-15.4%	1-11.1%	2-22.2%			1-50.0%		1--6.7%	14
3-12 hours	6-17.6%		2-22.2%	2-22.2%		1-25.0%			2-13.3%	13
12-24 hours	1--2.9%		1-11.1%		2-28.6%		1-50.0%		2-13.3%	7
1-2 Days	2--5.9%							1-14.3%		3
2-5 Days	2--5.9%		1-11.1%	1-11.1%	1-14.3%	1-25.0%		1-14.3%	1--6.7%	8
Over 5 Days	1--2.9%									1

TABLE VIII

ONSET OR INTENSIFICATION OF ATTACKS:

Morning		1--7.7%								1
Evening	2-5.9%	1--7.7%			1-14.3%					4
Morning and Evening						1-25.0%			1--6.7%	2
On Arising	4-11.8%		1-11.1%							5
Night or Sleep	7-20.6%	1--7.7%				1-25.0%	1-50.0%		1--6.7%	11
Afternoon	1--2.9%									1
Days Only		2-15.4%		1-11.1%	2-28.6%				1--6.7%	6

TABLE IX

	Histamine	Tension	Anxiety Reaction	Psychophysiological Reaction	Conversion Reaction	Migraine	Somatization Reaction	Miscellaneous	Undetermined Etiology	Total
PSYCHOLOGICAL TESTING OR PSYCHIATRIC EVALUATION:										
Number Evaluated	4-11.8%		5-55.6%	4-44.4%	4-57.4%	1-25.0%	2-100%	2-28.6%	4-26.7%	26
Anxious	1--2.9%		3-33.3%	2-22.2%	1-14.3%	1-25.0%	2-100%	1-14.3%	2-13.3%	13
Immature	2--5.9%		2-22.2%	2-22.2%	2-28.6%	1-25.0%	2-100%			11
Passive, Dependent	2--5.9%		1-11.1%	3-33.3%	3-43.0%			1-14.3%		10
Hostile, Aggressive	2--5.9%		2-22.2%	2-22.2%	3-43.0%		1-50%			10
Schizoid Tendencies			2-22.2%	1-11.1%	1-14.3%			1-14.3%	1--6.7%	6
In Conflict	2--5.9%		1-11.1%	1-11.1%			1-50%			5
Depressed			1-11.1%			1-25.0%			1--6.7%	3
Inadequate Personality			1-11.1%					2-28.6%		3
Inferiority Feelings			1-11.1%		1-14.3%					2
Rigid, Conforming	1--2.9%						1-50%			2

TABLE X

PAST MEDICAL HISTORY

BODY AREAS INVOLVED IN OTHER ILLNESSES:

Skin	7-20.6%	1--7.7%		2-22.2%	1-14.3%	4-100%	1-50%			16
EENT and Sinus	18-53.0%	6-46.1%	3-33.3%	2-22.2%		2-50%		2-28.6%	6-40.0%	39
Respiratory	6-17.6%	6-46.1%	2-22.2%	2-22.2%		1-25%			8-53.4%	25
GI Distress	9-26.5%	8-61.5%	1-11.1%	1-11.1%	3-43.0%	3-75%	1-50%	4-57.4%	8-53.4%	38
GU-Non-venereal	4-11.8%	2-15.4%	1-11.1%	2-22.2%					2-13.3%	11
Venereal	8-23.5%	2-15.4%		2-22.2%	1-14.3%			1-14.3%		14
Cardio-vascular	8-23.5%	4-30.8%	2-22.2%	2-22.2%	3-43.6%	1-25%		2-28.6%	7-46.6%	29
Neuro-muscular	6-17.6%	1--7.7%			1-14.3%	1-25%		1-14.3%	7-46.6%	17
Mental	7-20.6%		2-22.2%	3-33.3%	3-43.0%	3-75%	1-50%	4-57.4%	4-26.7%	27
Other	10-29.4%	3-23.1%	2-22.2%	4-44.4%	1-14.3%	1-25%		1-14.3%	4-26.7%	26
Trauma not to Head	19-56.6%	7-53.8%	6-66.7%	5-55.6%	3-43.0%	2-50%	1-50%	1-14.3%	6-40.0%	50
Trauma to Head	2--5.9%	2-15.4%	3-33.3%	2-22.2%	3-43.0%	2-50%		3-43.0%	3-20.0%	20
No Other Complaints	2--5.9%		2-22.2%	1-11.1%				2-28.6%		7
No History of Trauma	12-35.3%	5-38.4%	2-22.2%	3-33.3%	2-28.6%	1-25%	1-50%	3-43.0%	8-53.4%	37

TABLE XI

	Histamine	Tension	Anxiety Reaction	Psychophysiological Reaction	Conversion Reaction	Migraine	Somatization Reaction	Miscellaneous	Undetermined Etiology	Total
SOURCES OF RELIEF:										
Histamine Desensitization	28-82.4%	3-23.1%						1-14.3%	2-13.3%	34
Aspirin, APC, Empirin	5-14.7%	6-46.1%	6-66.7%	5-55.6%	3-43.0%	2-50%	2-100%	3-43.0%	7-46.6%	39
Codeine	5-14.7%	1-7.7%		2-22.2%		1-25%		2-28.6%	5-33.3%	16
Demerol or Morphine	2-5.9%			1-11.1%						3
Cafergot, etc.	6-17.6%	1-7.7%			1-14.3%	3-75%	1-50%		1-6.7%	13
Antihistaminics	1-2.9%					1-25%			1-6.7%	3
Psychotherapy			1-11.1%		1-14.3%			2-28.6%		4
Heat	1-2.9%		1-11.1%			1-25%				3
Rest, Sleep, Lying Down			1-11.1%	1-11.1%	2-28.6%	1-25%				5
Activity	3-8.8%	1-7.7%								4
Sedation		1-7.7%			1-14.3%		1-50%			3
Tranquilizers			1-11.1%			1-25%				2
Conversation			2-22.2%							2
Other	1-2.9%	3-23.1%	1-11.1%	3-33.3%				2-28.6%	4-26.7%	14