méthylurique (1-MU) et en 3-méthylxanthine (3-MX) furent de 18.7 ± 2.5 et 12.6 ± 2.1 pourcent dans le premier groupe et 26.5 ± 6.0 et 17.1 ± 2.0 pourcent dans le deuxième groupe, respectivement ($p<0.05$). Le contenu de la fraction urinaire en acide 1,3-déméthylurique fut de 51.8 ± 3.2 dans le premier groupe et 44.7 ± 4.1 dans le deuxième groupe ($p<0.05$), respectivement. Une corrélation inverse a été obtenue entre les concentrations sériques de mexiletine et le contenu de la fraction urinaire en 1-MU et en 3-MX ($r=0.704$). Ces résultats suggèrent que le mécanisme de l'intéraction entre la théophylline et le mexiletine est une inhibition de la déméthylation de la théophylline par le mexiletine.

CHANTAL GUEVREMONT

PATTERNS OF NICOTINE GUM USE IN A HEALTH MAINTENANCE ORGANIZATION

Richard E. Johnson, Jack F. Hollis, Victor J. Stevens, and Gary T. Woodson

ABSTRACT: Nicotine chewing gum is designed as an aid to smokers who intend to stop smoking. However, the efficacy of the gum in general medical practice has been questioned. This study describes the extent of nicotine chewing gum use among health maintenance organization members, the characteristics of prescribers and users, and the patterns of gum use over a two-year period. About 0.4 percent of Kaiser Permanente, Northwest Region members were exposed to the gum. Over the two-year observation period, 1970 members received at least one box (96 pieces) of the gum. Almost 70 percent of users received only one box of the gum. About 1.5 percent of users appeared to use the gum continuously at a daily dosage around the level needed to replace the nicotine addiction among most smokers, and for longer than the recommended three months. Another 2.5 percent appeared to use the gum continuously but at less than a nicotine-addiction replacement dose for longer than the recommended maximum of six months. The presence of a prepaid prescription drug benefit directly affected whether or not a person received the gum and how long he used it. The extreme variation in the patterns of use raises the questions of why the gum is used in this manner, and how effective it is when used in this manner.

DICP Ann Pharmacother 1991;25:730-5.

NICOTINE CHEWING GUM was approved by the Food and Drug Administration in 1984 for marketing as an aid to smoking cessation. By 1988, it was the 89th most frequently dispensed prescription drug in the US.[1]

The gum is designed to provide temporary nicotine replacement to alleviate withdrawal symptoms. The indications for nicotine gum use specifically state that it is "a temporary aid to the cigarette smoker seeking to give up his or her smoking habit while participating in a behavioral modification program under medical or dental supervision."[2] Patient guidelines call for abstinence from all forms of tobacco, use of the gum as part of a program of smoking cessation, and use of from 10 to 12 pieces of the gum per day by most persons to control the urge to smoke during the first three months of treatment. After three months, a gradual withdrawal from gum use is recommended with completion of treatment within six months.[2]

Considerable literature supports the efficacy of nicotine gum when offered as part of an intensive behavioral treatment program involving multiple follow-up contacts, training in coping strategies, and continued social supports.[3-5] However, when nicotine gum was compared with a placebo or no gum in randomized clinical trials in general medical practice settings, with or without providers' advice to quit and self-help materials, no differences were found in long-term quit rates.[6-11] This was true both for randomly selected smokers[7-9] and among smokers who were motivated to quit.[11]

Although the gum has shown promise when used according to the guidelines, little is known about how the gum actually gets used in nonresearch, general, medical practice settings. Who prescribes the gum and who uses it? Among those who use the gum, how much do they use and for how long? Has dependence been observed with long-term use?

This study used a computerized pharmacy system within a prepaid group practice health maintenance organization (HMO), Kaiser Permanente (KP), Northwest Region, to investigate these questions among the 370 000 HMO members. Described are estimates of the prevalence, amount, and duration of gum use; characteristics of prescribers and users; and patterns of gum use in this population over a two-year period.

Methods

RESEARCH SETTING

The setting for the study is the northwest region of KP, which is a prepaid, group practice HMO that provides comprehensive and integrated inpatient and outpatient care for an enrolled population. It is located

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Funded in part by PHS Grant #2 SO7 RRO5521-27.

largely in the Portland, Oregon and Vancouver, Washington metropolitan areas. The sociodemographic characteristics of the enrolled population are closely representative of the population of these metropolitan areas.[12-14]

KP maintains two hospitals and 14 ambulatory care facilities throughout these areas. Each hospital and ambulatory facility has outpatient pharmacies. Prepaid benefits include physician, hospital, laboratory and radiology services, immunizations, and injections. Prepaid dental and drug benefits are offered as an optional benefit. Approximately 70 percent of the KP membership have a prepaid drug benefit. Prescription drugs not covered by a prepaid benefit are provided to KP members at a reduced charge.

Physician services are provided to members by the Northwest Permanente, Professional Corporation, Physicians and Surgeons. Internists, pediatricians, and family practitioners provide primary care and are responsible for maintaining treatment continuity. Obstetricians/gynecologists are available in most facilities. The focal point for care is the medical office.

The Regional Formulary Committee of KP, Northwest Region, is responsible for the selection of prescription drugs. The committee has not included nicotine gum in the drug formulary because the preponderance of research evidence indicates its lack of effectiveness when used in general medical practice. Although a nonformulary designation is intended to discourage prescribers from ordering a drug, KP providers can prescribe nonformulary drugs if they choose, and currently all KP outpatient pharmacies stock the nicotine gum. Members also can obtain authorization from KP providers to have the prescriptions dispensed by non-KP pharmacies.

SOURCE OF PRESCRIPTION DRUG DATA

All prescriptions dispensed from KP outpatient pharmacies are entered into a computerized database. The following information about nicotine chewing gum prescriptions was used in this study: users' health record numbers (HRN), dates of dispensing, quantities dispensed, refill number, retail dollar charge, prepaid drug coverage, and prescribers' identification.

A second potential source of information was the manual system of prescription payment claims submitted to KP from non-KP pharmacies. All prescription claims from non-KP outpatient pharmacies during three randomly selected months in early and midyear 1988 and early 1989 were reviewed. Only three of the 491 outside prescription claims were for nicotine gum. As a result of the infrequent number of claims, this source of prescription drug data was not used.

Results

EXTENT OF NICOTINE GUM USE

All prescriptions for nicotine chewing gum dispensed from KP outpatient pharmacies during a two-year period (July 1, 1987–June 30, 1989) were identified from the automated outpatient prescription system. A total of 4505 prescriptions (dispensings) was retrieved. These prescriptions were received by 1970 different KP members. They represented approximately 0.37 percent of KP members 15 years of age and older in 1987, and 0.42 percent in 1988. Among these users, 70 percent received only one prescription for nicotine gum during the two-year period. The remainder of the users received from 2 to 64 prescriptions for nicotine gum.

Table 1. Number of Boxes of Nicotine Gum Per User over a Two-Year Period[a]

QUANTITY OF GUM (boxes)	USERS n	USERS (%)
1	1337	(67.8)
2	274	(14.0)
3–5	214	(10.8)
6–9	67	(3.4)
10–19	45	(2.3)
20–29	13	(0.7)
30–49	12	(0.6)
50–99	6	(0.3)
≥100	2	(0.1)
TOTAL	1970	(100.0)

[a]1 box = 96 pieces.

Table 2. Users of Nicotine Gum by Sex and Age Group[a]

AGE (y)	USERS (%)	PRESCRIPTIONS (%)
Males		
<25	1.6	0.9
25–44	20.1	19.9
45–64	17.2	17.3
≥65	4.8	5.0
SUBTOTAL	43.7	43.1
Females		
<25	1.7	1.0
25–44	26.9	27.3
45–64	21.9	23.4
≥65	5.8	5.2
SUBTOTAL	56.3	56.9
TOTAL	100.0	100.0

[a]Two prescriptions did not have sex or age information and represented two different users.

Ninety percent of the prescriptions were for one box (96 pieces). An additional eight percent were for two boxes, and the remaining two percent were for three to six boxes (288–576 pieces of gum). Table 1 shows the number of boxes of gum received per user during the two-year period. Most users received two or less boxes of gum. The two highest users, however, received 135 and 143 boxes of gum.

USERS

Women comprised more than half of nicotine gum users (56.3 percent) and received more than half (56.9 percent) of the prescriptions for the gum (Table 2). Most of the users were between the ages of 25 and 64 years (86.1 percent). This age group also received most of the prescriptions for the gum (87.9 percent). Women of child-bearing age (15–44 y) were the largest number of users of any sex–age group.

USE AND CHARGES BY PREPAID DRUG BENEFIT

Table 3 shows the level of gum use and estimated retail charges per user by type of prescription drug benefit. The recording of the member's drug benefit status on prescriptions was initiated in January 1988, so the number of users is less than the total for the two-year period. The charges for each user are retail equivalents based on an estimated retail charge of $26.50 per box, because most of the users had some form of prescription drug benefit to cover some or all of their prescription costs. An ANOVA indicated that gum use varied significantly by type of drug benefit ($p<0.001$). A Duncan multiple range test indicated that those with zero or $1.00 copayments used significantly more gum than any other groups. Those with a 50-percent copayment or no prepaid drug benefit used significantly less gum than all other groups. The extent of gum use among those with no drug benefit, however, may be somewhat underestimated as some of these KP members may

not have filled their prescriptions at KP pharmacies. Given the convenience and competitive pricing policies of KP pharmacies, this was probably not a common occurrence.

PRESCRIBERS

A total of 374 prescribers of nicotine gum were identified. Ninety-four were non-KP providers, but they accounted for only a small share of the total number of nicotine gum prescriptions (6.6 percent). Among KP providers, physicians accounted for most of the prescriptions (87.0 percent); physician assistants and nurse practitioners accounted for the remainder (Table 4). Most of the prescriptions of KP prescribers (70.4 percent), physician and nonphysician, were from family practice and internal medicine, the specialties that provide primary care in KP.

The gum was prescribed by 53 different KP family practitioners. Five of them accounted for 35 percent of the prescriptions written by the specialty. Of the 87 different KP internists prescribing the gum, 5 accounted for 25 percent of the prescriptions. Two of the 20 prescribing obstetricians/gynecologists accounted for 75 percent of the prescriptions written by the specialty. Overall, 25 KP providers accounted for 45 percent of the prescriptions for nicotine gum.

About 95 percent of the users received all of their nicotine gum prescriptions from the same prescriber. The remaining users received prescriptions from two to four prescribers, almost all from two.

Table 3. Mean Number of Pieces of Nicotine Gum and Mean Charge by Prescription Drug Benefit

DRUG BENEFIT (COPAYMENT/Rx)	USERS (n)	GUM PIECES/ USER[a]	GUM CHARGE/ USER ($)[a]
0	123	462	88
$1	98	417	79
$2	543	284	54
$3	301	264	50
$5	121	263	50
50%	310	197	38
No drug benefit	148	141	27
TOTAL	1644[b]	271	51

[a]Variance ratio = 3.7, p = 0.001.
[b]Prepaid drug eligibility unavailable for first six months.

Table 4. Number of Prescriptions for Nicotine Gum by Type of Provider

TYPE OF PROVIDER	Rxs (n)	PERCENTAGE
Family practice MD	1565	37.8
Internal medicine MD	1349	32.6
Obstetrics/gynecology MD	244	5.9
Other MD specialties	441	10.7
SUBTOTAL	3599	87.0
Physician assistants	390	9.4
Nurse practitioners	148	3.6
SUBTOTAL	538	13.0
TOTAL KP PROVIDERS	4137[a]	100.0

[a]An additional 294 prescriptions were prescribed by non-KP providers, and type of provider was not available for 74 prescriptions.
KP = Kaiser Permanente; MD = medical doctor.

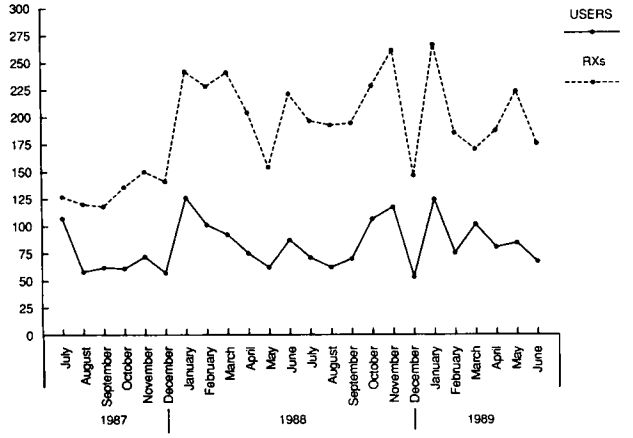

Figure 1. Number of different users and prescriptions for nicotine gum by month, 1987–1989.

PATTERNS OF USE

Figure 1 shows the number of persons who received at least one prescription for nicotine gum over the two-year period, and the total number of prescriptions for nicotine gum dispensed from KP pharmacies each month during the two-year period. The number of different users each month varied substantially, with the largest number of new users occurring in January of each year. The number of prescriptions received gradually increased.

The first dispensing of a specific prescription drug can signal the beginning of drug treatment for a particular condition, or, in the case of chronic diseases, the continuation of treatment with the specific drug. Ninety-one percent of the users had one new prescription (first dispensing) during the two-year period, suggesting that most of the users began using the nicotine gum during the two-year period.

AVERAGE DAILY DOSAGE AND DURATION OF USE

The marketer of the gum has stated that for most persons the dose of nicotine gum needed to control the urge to smoke is from 10 to 12 pieces per day. We assumed an average daily dosage of eight or more pieces was a conservative but reasonable estimate of a daily dose to substantially replace the nicotine from cigarettes. Duration of use refers to the possible number of days the gum could have been used.

The largest percentage of users (70 percent) received only one prescription for the gum. We have no way of estimating average daily dosage and duration of use. Some of these users may have used only a few pieces and saved or discarded the rest. If they did use eight or more pieces a day, their maximum duration of use would have been 12 days. A few of these users received their prescriptions during the last week of the two-year study period. However, it is not likely that this minimal number of dispensings per person reflects a substantial number of these users terminating their membership or being refused refill prescriptions by the provider or pharmacist.

Among the 19 percent of users who received two or three prescriptions, an estimate of the average daily dose was obtained by dividing the quantities received per dispensing, exclusive of the last dispensing, by the total number of days between the first and the last dispensings.

About 14 percent of these users had an estimated average daily dose of eight or more pieces of gum. In contrast, 30 percent of these users had an average daily dose of less than one piece of gum, suggesting a noncontinuous pattern of use.

Among the users with an average daily dose of eight or more pieces of gum, the maximum number of days of use was 36, assuming the estimated daily dosage level continued for the last dispensing. The number of days between the users' first and last dispensings ranged from one, refilled the next day, to 667 days, refilled almost two years later.

The 216 users (11 percent) with four or more prescriptions were important because they received half of all nicotine gum prescriptions and because they had the potential to exceed the marketer's guidelines for duration of use. The prescriptions of these users were reviewed for continuous use, which was considered consistent average daily doses between dates of refills. For this group of users, estimates of the number of days of continuous use were developed. This referred to the number of consecutive days that the gum could have been used at a consistent average daily dose.

Users could have more than one period of continuous use. In addition, a truncated pattern of continuous use occurred when the date of the last dispensing and the quantity dispensed suggested that the gum was still being used after the study period.

Not all prescriptions were necessarily included in a user's period of continuous use. If no periods of continuous use (no consistent average daily doses between dates of refills) were apparent during the two-year period, the pattern of prescription receipt was classified as sporadic.

Among the 216 users, 195 (90 percent) had periods of continuous use. The 21 users with sporadic patterns of use are not included in Table 5. Among those with continuous use, 19 had two periods of continuous use, and two had three periods of continuous use during the two-year period, making a total of 218 periods of continuous use among these users.

Thirty percent of these 218 periods had estimated average daily dosages of eight or more pieces of gum, and 43 percent of these periods of use did not meet the guideline of gradual withdrawal after three months. Eighteen percent were truncated—that is, apparently continuing beyond the study period. Two users with truncated periods used an average of more than 14 pieces of gum per day the entire period.

The remaining 70 percent of periods of continuous use had estimated average daily dosages of less than eight pieces of gum per day. Thirty-one percent of these periods exceeded 6 months in length, the length when treatment should be completed as indicated by the guidelines, with the longest continuous period of use being 19 months. Ten percent were truncated.

Summary

About 0.4 percent of adult KP members received a prescription for nicotine gum each year. This level of exposure is substantial, given that the more frequently prescribed drugs in any year are generally received by less than one percent of the population. The increased number of new users (first dispensings) of nicotine gum prescriptions dispensed over time suggests an increased acceptance of the drug by providers, increased requests for the drug by KP patients, or both.

Frequently, however, the patterns of nicotine gum use in this population did not follow the guidelines for its effective use. For example, 70 percent of users received one box of the gum at most. This level of use to halt a nicotine addiction suggests that the gum was either a very quick and effective way to stop smoking, or that most people gave it only a short-term trial. The latter situation could have resulted from a perceived lack of effectiveness, adverse effects, bad taste or texture of the gum, or inadequate instructions regarding use of the gum.

Less than three percent of all users appeared to use eight or more pieces of gum per day continuously for one month or longer. About half of these users, or close to 1.5 percent of all users, used the gum continuously at this dosage level for longer than the recommended three months of continuous treatment. This long-term use, particularly among those with continuous use of 12 months or more, could reflect the transfer of the nicotine dependence to the gum.

Another seven percent of all users appeared to use the gum continuously at low dosage levels (i.e., from less than one piece per day to seven pieces per day) for one month or longer. About one-third of these users, or more than two percent of all users, appeared to use the gum continuously at low daily dosages for longer than the recommended

Table 5. Nicotine Gum Dosage and Duration of Continuous Use[a]

DURATION OF CONTINUOUS USE (mo)	AVERAGE DAILY DOSAGE				ALL PERIODS OF CONTINUOUS USE	
	PERIODS WITH <8 PIECES/DAY		PERIODS WITH ≥8 PIECES/DAY			
	n	%	n	%	n	%
<1	4	2.6	13	20.0	17	7.8
1<2	8	5.2	18	27.6	26	11.9
2<3	38	24.9	6	9.2	44	20.2
3<4	26	17.0	4	6.2	30	13.8
4<5	16	10.5	2	3.1	18	8.3
5<6	14	9.2	3	4.6	17	7.8
6<9	27	17.6	7	10.8	34	15.6
9<12	8	5.2	1	1.5	9	4.1
12>18	10	6.5	7	10.8	17	7.8
≥18	2	1.3	4	6.2	6	2.7
TOTAL	153	100.0	65	100.0	218	100.0

[a]Users with four or more prescriptions.

maximum of six months. This pattern could have reflected continuing smokers who used the gum as a partial substitute for cigarettes generally, or when they were in nonsmoking environments such as smoke-free workplaces, restaurants, or airplanes. Another possibility for this pattern was exsmokers (treatment successes) who continued to use the gum to allay sporadic cravings for nicotine.

A potential safety-related issue was the extent of use of the nicotine gum by women of child bearing age, because the use of this drug is contraindicated in pregnancy. Women 15–44 years of age represented the largest proportion of users of any sex–age group. No data, however, were available on how many of these women were pregnant during the two-year period.

The sporadic users of the gum, the approximate one percent of all users who received four or more prescriptions for the gum in no consistent temporal pattern, may have included exsmokers who keep the gum for use when an urge to smoke returns. This group may have also included continuing smokers who used the gum in repeated unsuccessful attempts to quit. Both of these types of use of the gum are recommended to reinforce or to increase the odds of smoking cessation. Regarding attempts to quit, the larger number of users having prescriptions dispensed during the first month of each year could be the result of New Year's resolutions to quit smoking.

The strong, direct relationship between prepaid drug benefits and the extent of gum use suggests that costs to patients affect whether or not they try the gum and how long they use the gum. Those with the lowest out-of-pocket costs are the most likely to try the gum and to use it for the longest time.

It appears that about three-fourths of the users had questionable patterns of nicotine gum use. These questionable patterns of gum use occurred in an HMO setting where the drug formulary committee has formally attempted to inform prescribers about when and how the gum should be prescribed. Many physicians apparently do not use the information, possibly because of their acquiescence to patient requests or demands to try the gum. This prescribing behavior is not consistent with the guidelines for use of the gum, and would certainly result in questionable patterns of use. The patterns of use in these HMO settings would appear to be at least as likely to occur in non-HMO settings where providers face fewer constraints on their prescribing practices.

Further investigation of the way the gum is being used in this setting is needed. The use of the gum needs to be examined in relation to the past smoking history and current smoking status of users, in relation to their knowledge and attitudes about nicotine gum, and in relation to the potential adverse effects of the gum. In the interim, efforts should be undertaken to facilitate more rational use of the gum at both the low and high ends of the use spectrum. Long-term continuous users should be systematically identified and efforts should be made to gradually reduce their reliance on the gum, and the duration of gum use should be limited. Based on the results from efficacy trials, patients interested in trying the gum should be required to enroll in a formal smoking-cessation program before they are given any prescription for nicotine gum. Because a few prescribers may be responsible for a large share of the prescriptions for the nicotine gum, these prescribers should be targeted for educational programs regarding how to prescribe the drug effectively. ≃

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EXTRACTO

La goma de mascar de nicotina ha sido diseñada como una ayuda para aquellas personas que intentan dejar de fumar. La eficacia de esta goma, sin embargo, ha sido cuestionada en la práctica médica. Este estudio describe el grado de utilización de la goma de mascar de nicotina entre miembros de un proveedor de servicios de salud; las características médico-paciente y los patrones de uso de la goma en un período de dos años. Cerca del 0.4 por ciento de los miembros de Kaiser Permanente (KP), Northwest Region, utilizaron la goma de mascar. Durante el período de dos años, 1970 miembros de KP recibieron por lo menos una caja (96 trociscos) de la goma. Alrededor de 70 por ciento recibieron una caja solamente. Cerca del 1.5 por ciento utilizaban la goma contínuamente en una dosis diaria suficiente para reemplazar el nivel de nicotina necesario por más de los tres meses recomendados. El 2.5 por ciento utilizaron la goma contínuamente en una dosis menor por más de seis meses. El beneficio de un servicio de salud con receta médica prepagada afectó directamente el uso y la duración de la terapia. La variación extrema en los patrones de uso eleva la pregunta de porqué esta goma de mascar se utiliza de este modo y cuán efectiva es.

RAFAELA MENA DE GIRALDI

RESUME

La gomme à mâcher à base de nicotine est utilisée comme adjuvant pour les fumeurs qui veulent cesser de fumer. L'efficacité de la gomme est cependant remise en question. Cette étude a pour but de décrire

l'importance de l'utilisation de la gomme à base de nicotine parmis les membres d'un HMO, de caractériser les prescripteurs et les utilisateurs, et de décrire l'utilisation de la gomme sur une période de deux ans. Environ 0.4 pourcent des membres du Kaiser Permanente, Northwest Region ont été exposés à la gomme. Lors de la période de deux ans, 1970 membres ont reçu au moins une boite de gomme (soit 96 morceaux). Presque 70 pourcent des usagers n'ont reçu qu'une seule boite. Environ 1.5 pourcent des usagers semblaient utiliser la gomme sur une base régulière à une dose quotidienne correspondant à la dose de remplacement pour les fumeurs dépendant à la nicotine, et ce, pour une période supérieure à la recommendation de trois mois. Un autre groupe (2.5 pourcent) utilisait aussi la gomme régulièrement mais à une dose inférieure à la dose de remplacement pour fumeurs dépendant à la nicotine pour une période dépassant le maximum recommandé de six mois. La présence d'une assurance couvrant ce produit influence directement le fait qu'une personne utilise ou non la gomme et la durée de l'utilisation. Les variations importantes notées dans cette étude soulèvent la question des raisons justifiant un tel usage et de l'efficacité du produit consommé de cette façon.

MARC PARENT

PHARMACOTHERAPY CASE REPORT

INTRAVENOUS ESMOLOL IN ACUTE AORTIC DISSECTION

Subodh K. Mohindra and George O. Udeani

ABSTRACT: Acute aortic dissection is a devastating condition requiring prompt intensive pharmacologic management geared toward control of blood pressure and reduction in myocardial contractility (change in velocity/change in time). The treatment of choice currently is sodium nitroprusside and intravenous propranolol hydrochloride. During acute aortic dissection, hemorrhage may spread into the interatrial septum, extending to the atrioventricular junctional tissues, thus causing conduction abnormalities. Adverse effects of long-acting beta-blockers, including bradycardia, heart failure, and bronchospasm, may limit their usefulness because these effects persist for a long time after discontinuation. This may be detrimental, especially in patients with compromised cardiac function, bronchospastic disease, or both. We report a case of a 64-year-old woman with compromised cardiac function and aortic dissection who was successfully treated with esmolol hydrochloride (an ultrashort-acting beta-blocker) and sodium nitroprusside.

DICP Ann Pharmacother 1991;*25*:735-8.

ACUTE AORTIC DISSECTION is one of the most devastating disease processes involving the human aorta. Approximately 2000 new cases are reported in the US annually.[1,2] Major advances in the diagnosis and management of this catastrophic condition have occurred in the last 20 years. About 90 percent of patients with aortic dissection have hypertension. Other predisposing factors include pregnancy, Marfan syndrome, congenital bicuspid aortic valve, and coarctation of the aorta.[3] The major symptom of acute aortic dissection is sudden onset of excruciating pain that is commonly located in the chest but may be more prominent in the neck and jaw. In some patients it may not present in the chest and may be localized in the abdomen, especially if the gastric or mesenteric arteries are involved. Debakey et al. classified aortic dissections into types I, II, and III. Based on Debakey's nomenclature, types I and II dissections both begin in the ascending arch and aorta, whereas type II is confined to the ascending aorta. Type III dissection starts in the descending aorta and propagates distally for a variable distance.[4] Daily et al. use a simpler classification scheme, which disregards the site of origin of the dissection. In their classification, all dissections involving the ascending aorta are termed type A and those that do not, type B.[5] Throughout this report, we will use Daily's classification scheme for acute aortic dissection.

This condition may be diagnosed from patient history and physical examination; however, this diagnosis must be approached cautiously because acute aortic dissection has been frequently mistaken for conditions such as myocardial infarction (MI), pulmonary embolism, pneumothorax, colic, pericarditis, and acute arterial embolism.[6] Diagnosis

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