
Family Practice Grand Rounds

Health Problems in Indo-Chinese Immigrants

Jim L. Wilson, MD, Jack Brunson, MD, and Michele Johnson
Mobile, Alabama

DR. JIM L. WILSON (*Associate Professor, Department of Family Practice*): I would like to welcome the family physicians from the local community, the faculty and residents from the Department of Family Practice, those of you in the outlying communities who are with us via the telephone hookup, and all other guests to the Family Practice Conference this morning. Today we will discuss the health problems in Indo-Chinese refugees. With the postwar influx of Indo-Chinese refugees into this country, many family physicians have encountered refugee families in their practice. Family physicians in southern Alabama are no exception. Recently a Laotian family

came to the University of South Alabama Family Practice Center for health care and Dr. Jack Brunson, a first year family practice resident, has taken them into his practice. Because of the health needs of this family, Dr. Brunson has had to go to the literature and to other sources in an effort to find answers to questions on some of the information he has uncovered. Also with us is Michele Johnson, who is Diocesan Director of Migration and Refugee Services for the Catholic Social Services in Mobile. She will talk about the role of her agency in helping to resettle refugees. Without saying anything further, I will turn the conference over to Dr. Brunson, who will present the family and discuss the protocol he has developed for dealing with the health problems of refugee families.

DR. JACK BRUNSON (*First Year Family Practice Resident*): It is quite true that this family presented me with a unique situation in my limited experience. By assuming responsibility for the health care of a Laotian family that had been in the United States only four months, I was confronted with a variety of new problems. We all know from the news reports that immigrants from Southeast Asia have been coming into this country on a large scale since May 1975. There have been 300,000 Southeast Asian immigrants from Laos, Cambo-

From the Department of Family Practice, University of South Alabama, Mobile, Alabama; Greenville, South Carolina; and the Migration and Refugee Services of the Catholic Social Services, Mobile, Alabama. At the time the paper was written, Dr. Brunson was a family practice resident with the Department of Family Practice, University of South Alabama, Mobile, Alabama. Requests for reprints should be addressed to Dr. Jim L. Wilson, Department of Family Practice, University of South Alabama, 2451 Fillingim Street, Mobile, AL 36617.

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dia, and Vietnam. They have been entering the United States at a rate of about 13,000 a month for the past six months. There are an estimated half million more refugees still in the refugee camps seeking immigration to the United States or some other Western country.

Refugee camps are situated all along the border between Laos and Thailand and Cambodia and Thailand. Refugee camps have also been established in Malaysia, principally for the boat people from Vietnam. Large numbers of refugees have been processed and resettled very quickly. Of the 300,000 refugees who have been relocated in the United States, about 85 percent enter the country through ports on the West Coast or in Hawaii. Approximately 40 percent remain in or near the port of entry. Representative figures for the southeastern states include a refugee population of 25,000 in Texas, 10,000 in Louisiana, and 2,000 in Alabama, with slightly less than half of those in Mobile county. The Southeast Asian refugees are particularly attracted to the Gulf Coast because the climate and terrain are more familiar to them. Also, they may feel some affinity to this area because of the French cultural influence. I think we can expect to see more refugees coming to the Gulf Coast, and based on previous immigration statistics, I expect the nationality breakdown will be about 60 percent Vietnamese, 20 percent Laotian and 20 percent Cambodian.

Prior to my involvement with the family we will present today, my experience with refugee health care was limited to the small amount of reading that I had done. I therefore did not feel well prepared to deal with some of the problems they presented. I discovered that I knew some of the relevant material, such as some of the problems to screen for, but other things I needed to learn by searching through the literature. So far much of the useful information has not been organized or recorded in one place.

I would like to begin by introducing the family. I am told that the family name indicates they were probably urban dwellers, but I do not know precisely what city they came from. The family consists of the father, 31 years of age; the mother, 28 years of age; and two children, a boy 7, and a girl 1 year of age. Also living with the family is the father's 16-year-old brother. The father's older brother settled in this area about a year ago. The older brother speaks English fairly well, and his

family is becoming established in the community.

Before immigrating to this country, the father was employed in a hospital, but I am not sure of the exact nature of his work. He also served in the Laotian army for a while and was captured by the Communists. After the Laotian government was overthrown, he was in a prison camp for at least one year before escaping to rejoin his family. Following that, he and his family crossed the border to one of the refugee camps in Thailand, where they remained for almost two years. The baby was born in the refugee camp and spent her first few months there.

From our initial assessment of the family members, several medical problems were identified. The father had a parasitic infestation with *Clonorchis sinensis*, the Chinese liver fluke. He was asymptomatic, and our consultant for infectious diseases has recommended that his condition not be treated at this time. The father also had a past history of malaria, but he has been asymptomatic for two or three years. We have not done blood smears on him, and I have assumed that malaria is no longer an active problem. He has been hospitalized twice in the last two months for a total of nine days for the treatment of urinary tract infections. Since the last hospitalization he has been well.

To our knowledge the mother had had no serious health problems. She has had two pregnancies, both of which were uneventful. She and her husband are concerned about contraception. During the time they were at the refugee camp, she received hormone injections to prevent ovulation. Recently she has decided to try an intrauterine device, which will be inserted on her next visit to the office. She also has a severe visual impairment in her left eye, which is being evaluated by an ophthalmologist.

The seven-year-old son seems to have had normal growth and development for his age. He has been treated for a *Trichuris trichiura* infestation. When I first examined the baby two months ago, she was below the tenth percentile for height and weight. Up to that time she had received only breast feeding and had had no solid food. Otherwise, her development was normal. The 16-year-old brother is apparently healthy.

DR. WILSON: Michele Johnson, a social worker with the Catholic Social Services, has been assisting many of the refugee families during their

resettlement phase in the Mobile area. We have asked her to present some background information on the refugee families in this area and to discuss how she and the agency she represents are involved in the resettlement process.

MS. MICHELE JOHNSON (*Director of Migration and Refugee Services, Catholic Social Services, Mobile, Alabama*): I work with the United States Catholic Conference, 1 of 11 volunteer agencies involved in the resettlement of Southeast Asian refugees in the United States. Working under the umbrella organization, The American Council for Voluntary Services, we have representatives in refugee camps throughout Southeast Asia. We have coordinated the refugee resettlement process within the southern 18 counties of Alabama and have assisted in the resettlement of refugees in a number of communities throughout the area.

So that the different groups can support each other and help each other through the resettlement process, we have attempted to settle ethnic groups and nationality groups in the same locations. In Mobile we have Laotians, including Hmong and Yao tribesfolk, Cambodians, Vietnamese, and ethnic Chinese. Many of the more recent arrivals have had multiple medical problems. As we know from news reports, many of the escaping refugees have experienced severe physical and emotional hardships before arriving in the United States.

I would like to take you through the process of resettlement, beginning with the arrival in a refugee camp all the way to resettlement in Mobile, Alabama.

Upon arrival at one of the camps, a refugee receives a cursory medical evaluation. This evaluation includes a superficial examination and treatment for any obvious problems. Next he or she goes through a health screening process, which includes (1) a brief medical history of present or past illnesses, (2) a test for syphilis for refugees 15 years or older, (3) an examination for leprosy or other skin conditions, (4) a chest x-ray for tuberculosis for anyone 15 years of age and older and for anyone under 15 if he has symptoms or if there is a history of tuberculosis in a family member, and (5) an evaluation for any excludable mental condition. The above mentioned health screening process constitutes the routine examinations required by the United States immigration laws for refugees arriving in this country.

A refugee may be excluded on the basis of venereal disease, active tuberculosis, infectious leprosy, or mental disorders such as mental retardation, insanity, severe personality disorders, chronic alcoholism, or narcotic addiction. However, through an immigration procedure called I-601, a waiver for any of these excludable conditions may be granted. A waiver may be obtained if the refugee demonstrates that he or she has recovered from the illness or if he has been under treatment for six months. If any of the excludable conditions is detected in the refugee camp, the refugee may be placed on a medical hold for treatment before being allowed to resume the immigration process. After the treatment, the refugee would have to go through the recertification process, and sponsorship would have to be reconfirmed. Narcotic addiction, chronic alcoholism, and infectious leprosy are conditions for which waivers are prohibited.

In addition to the health screening, each refugee must go through a series of security clearance checks. It is also necessary to establish that each individual is, in fact, a refugee. According to the State Department definition, a refugee is anyone who is forced to flee his or her homeland because of persecution or a well-founded fear of persecution based on political, personal, or religious reasons.

After the refugee has been medically certified and has received approval to immigrate, a sponsor is found and travel arrangements are made from the transit camp to a port of entry in the United States. The refugee arrives after a plane trip sometimes as long as 19 hours. Upon arrival into the United States, there is additional processing, and the immigration documents and health records are reexamined. Once these documents are found to be in order, the refugee is booked on a commercial flight to a final destination. Upon arrival in Mobile the refugee is usually in need of an opportunity to eat and sleep. For the first few days we give him a chance to rest and to familiarize himself with his surroundings. One of the first things after that is to make a visit to the physician.

We have been involved in this program since 1975. It began as a temporary measure and was not expected to continue beyond a few months. Recently, however, I attended a meeting in Chicago, where there was discussion about continuing the resettlement program through the end of the 20th

century. It is important therefore that we develop an organized approach to the health care needs of the refugees. Our office has met these needs on an ad hoc basis. We have had difficulty locating physicians for some of the refugees, and although we have tried to arrange the services of an interpreter, it is difficult to try to locate an interpreter each time someone is needed. Most of the refugees who came in 1975 and 1976 are working full-time or going to school, making it difficult to get away to interpret for other refugees at medical appointments.

I would like to suggest two ways that family physicians may be able to help with the refugee problem here. One would be to learn as much as possible about the refugees and their problems. Another would be to help in developing a program to take care of the refugee health problems on an emergency basis until a more permanent arrangement could be made.

FAMILY PHYSICIAN: Where are your offices located?

MS. JOHNSON: The Catholic Social Services office is located at 400 Government Street in Mobile. The telephone number is (205) 438-1603.

FAMILY PHYSICIAN: What should I do if I need an interpreter?

MS. JOHNSON: We have identified several people in the community who speak the various Southeast Asian languages and dialects and who have volunteered to help. Many of them are resettled refugees. If you call us when you need an interpreter, we will contact our volunteers to see who is free to come assist you. It would be helpful if you notify us in advance when you will need the services of an interpreter.

DR. BRUNSON: For the remainder of the conference I would like to discuss some of the specific medical problems the physician may encounter. Information concerning these problems from the literature is fairly sketchy. As you can see from the description that Ms. Johnson gave, the initial medical screening provided is incomplete, and you can well imagine the difficult communication problems encountered in taking a medical history. The experiences of several other organizations in different parts of the country indicate that much more needs to be done in terms of health care after the refugees arrive.

While there is not much in the medical literature pertaining to refugee health problems, what is

available deals mostly with the Vietnamese. However, there may be important epidemiological differences between the various Indo-Chinese ethnic groups. There certainly are important cultural differences. In general, the Vietnamese as a group are probably the most healthy and the Cambodians the least healthy. The Vietnamese have lived under a heavy Western influence because of the long presence of the United States military in Vietnam. They tend to be more westernized, and there also is a higher urban population than in the other Southeast Asian countries.

In reviewing the literature I found only a few articles that dealt with health care screening of the refugee population. In one study of 356 individuals conducted by the Center for Disease Control (CDC), Atlanta, the significant problems uncovered included anemia, dental caries, fever, otitis media, tuberculin positive skin test, scabies, and intestinal parasites.¹ Waldman et al reported some data on health and nutritional status of refugees in the New Orleans area.² The American Academy of Pediatrics made some recommendations concerning the screening of children in the refugee population in 1975.³

In general, we can expect that the majority of these immigrants will be free from any major contagious disease. Whatever illness may be present is most likely to be more of an individual problem rather than a public health concern. I would like to cover some of these problems more specifically.

Tuberculosis

As Ms. Johnson stated, refugees older than 15 years of age get a chest x-ray examination. Skin testing is not recommended, and I assume that the reason for this is because of the large number of people who have received Calmette Guerin bacillus (BCG) immunizations. Children under 15 years of age will be screened by x-ray if there are adults in the family who have positive chest x-ray film results. Two classifications of tuberculosis are recognized. Class A means suspected active tuberculosis; those people with Class A tuberculosis can be waived. Class B is used to designate other than active tuberculosis, a classification given to people who are not considered infectious

Table 1. Immunization Program Recommended by the Center for Disease Control, Atlanta, as of February 1, 1980	
Age of Individual	Vaccination
2-14 months	DPT, OPV
15 months—6 years	DPT, OPV, MMR
7-13 years	Td, OPV, MMR
14-19 years	Td, OPV, MMR (except females)
≥20 years	Td
DPT—diphtheria, pertussis, tetanus OPV—oral polio vaccine MMR—measles, mumps, rubella Td—tetanus, diphtheria	

for purposes of travel. Class B includes people who have inactive tuberculosis, who have been adequately treated for active tuberculosis, or who are being treated currently for active tuberculosis.

Tuberculosis probably carries the greatest public health care risk. Holtan noted an incidence rate of 4 cases out of every 1,000 screened for tuberculosis in a group of Hmong refugees in the St. Paul, Minnesota, area.⁴ Dean reported that 26 cases of tuberculosis were discovered in a population of about 4,000 Southeast Asian refugees living in Minnesota in 1978.⁵ Even after the initial screening prior to arrival in the United States, some patients with active tuberculosis may be found. Forty to 50 percent of immigrants will have a positive skin test; but as mentioned before, there is some difficulty in interpretation because of the use of BCG. However, according to the recommendations, any skin test with 10 mm or greater reaction should be considered positive, and whether or not there is a history of BCG immunization, a chest x-ray film should be taken. If the chest x-ray film result is normal, it is recommended to treat with isoniazid (INH).

The recommendations for treatment are important because approximately ten percent of the individuals who have active tuberculosis have organisms that are resistant to INH. The Center for Disease Control recommends that Class A patients be treated with isoniazid, rifampin, and ethambutol.⁶ It should be understood that treated pa-

tients should be followed for the usual side effects of the medication. Streptomycin should be used in children rather than ethambutol. Class B individuals should be reevaluated when they enter the country and treated accordingly. Two or three drugs may need to be used. If they are truly Class B individuals, they are candidates for INH treatment. Preventive treatment is also recommended for contacts.

Routine Immunizations

The Center for Disease Control and the Health Services Administration of the Department of Health and Human Services (DHHS) have had the responsibility for providing screening and medical care for refugees until they reached their final destination. The Center for Disease Control, however, did not develop an immunization program in the country of origin or in the refugee camps until February of 1980. Their recommended immunization program is shown in Table 1.⁷ Since most of the refugees living in Mobile, Alabama, came before that time, their immunization status is uncertain. Many of them probably have not been adequately immunized. The family that I am caring for did have immunization records with them that indicated incomplete immunization.

Malaria

Malaria has traditionally been a significant health problem in the refugees' countries of origin. There are no figures documenting the current prevalence of malaria in the immigrating population. Routine thick and thin blood smears to detect malaria are not presently recommended, but they should be done in the presence of symptoms or strong clinical suspicion.

The classical symptoms of malaria are spiking temperatures and rigors, but there are other symptoms to look for. One of these is anemia. However, many of the refugees are likely to be anemic from a number of causes, including intestinal parasites, which are very frequently diagnosed in the refugee population. Some studies have indicated as many as 20 percent of the refugees are anemic. Complaints about headache, backache, and general malaise in an anemic patient should cause the physician to consider malaria in the differential diagnosis. The treatment of malaria depends on which of the three organisms may be causing the infection. The recommended treatment for malaria by the Center for Disease Control was discussed in a recent article.⁸

Hepatitis

Another important health concern recently recognized is the high incidence of chronic hepatitis. About 14 percent of the Southeast Asian refugees are chronic carriers of hepatitis B.⁹ An awareness of this incidence is important for medical as well as dental professionals who care for refugees. Recommended procedures for dentists who treat hepatitis B carriers are documented in *Viral Hepatitis Type B, Tuberculosis, and Dental Care of Indo-Chinese Refugees*.⁹ If hepatitis B is discovered in one family member, it is not necessary to treat the other family members, since they are most likely to be immune as a result of their close association with the affected family member. One important exception to this are the children of hepatitis B positive mothers. These infants should receive either the hepatitis B immune globulin or immune serum globulin within 48 hours of birth.¹⁰

It is also important to inform the patient that he

has a positive titer so that he can inform any subsequent medical professionals who care for him.

Leprosy

Leprosy (Hansen's disease) does exist in the refugee population. Although it is an excludable illness, it may be missed before the refugee arrives in the United States. Therefore, it is important to make the appropriate examinations and look for signs of the disease. If any signs of the typical skin lesions of Hansen's disease are present, especially if these lesions are anesthetic, the patient should have further work up. Also look for nodular subcutaneous lesions running along the course of the peripheral nerves. If a patient has skin lesions that would cause the physician to suspect leprosy, a sample of material from the lesion should be taken for culture. Tissue culture is done by implanting the material from the infected skin lesions in the foot pad of a mouse or an armadillo. At present, taking a tissue culture is about all one can do to detect the disease. A patient with Hansen's disease should be referred to a center specializing in the treatment of that disease.

Venereal Diseases

The prevalence of venereal diseases in the refugee population has been found to be relatively low. The treatment of gonorrhea or syphilis should follow the current CDC recommendations. A significant level of penicillin-resistant gonorrhea has not been found, even though a few years ago it appeared that there might be an outbreak of penicillin-resistant strains originating from Southeast Asia.

Intestinal Parasites

Intestinal parasites represent one of the most common problems encountered in the refugee

population. Lindes recently reported the results from stool examination of 70 individuals in 11 Laotian families,¹¹ showing that 77 percent of individuals and 100 percent of families tested had pathogenic parasitic infections from a variety of organisms. When 45 newly arrived refugee children were screened for intestinal parasites at the Georgetown University Pediatric Clinic, 78 percent had at least one and 55 percent had multiple parasitic infections. Other studies have reported similar findings. Therefore, it seems reasonable to recommend that all refugees should be tested for parasitic infections of the intestinal tract. The tests are relatively simple to perform, and there is effective treatment that is also relatively simple to administer.

The recommendations for screening which I developed after reading several articles include the following: (1) a good medical history, including a history of immunization, and a good nutritional history, preferably obtained in the native language, if possible; (2) a complete physical examination, including hearing and vision testing, growth and development evaluation of children, and screening for dental caries; (3) laboratory studies, including a complete blood count because of the incidence of anemias, a urinalysis, a stool specimen for parasites and bacterial culture (a high incidence of asymptomatic carriers of *Salmonella* has been reported; stools should be examined by several methods and should be repeated once or twice before one can be satisfied that there is no infection present), a VDRL, a purified protein derivative skin test, and a hepatitis B antigen screen; and (4) an alertness to the possibility of emotional or psychological problems.

It is also important to find out which cultural factors might affect health care. For instance, in the family we cared for, the baby was still being fed only breast milk at age ten months. This may have been a contributing factor to her anemia. Other important considerations include dental problems and psychosocial problems. At this time there is more information in the literature concerning the psychological and social problems encountered through the resettlement process than any other aspect of the health care of the refugee population.

FAMILY PHYSICIAN: What are the most common intestinal parasites?

DR. BRUNSON: *Ascaris lumbricoides*, *Trich-*

uris trichiura, and *Necator americanus* (hook-worm) are among the most common helminths. *Giardia lamblia*, *Endolimax nana*, and *Entamoeba coli* are the most common protozoans, although the latter two are considered nonpathogenic.

DR. WILSON: The flood of refugees from South-east Asia has caught the health care system in this country off guard. We were not well prepared for such a large influx of people whose health problems are rather different from those which we usually encounter. The whole issue of health care for Indo-Chinese refugees is in an evolving state. This problem may be more significant in other parts of the country where the refugee population is much larger than it is in Mobile.

I would like to thank Dr. Brunson and Ms. Johnson for their presentations today. I believe that they have shared some very useful information with us.

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