References

1. Miller DA, Tantravahi R, Dev VG, Miller OJ. Frequency of the Satellite association of the human chromosome is correlated with amount of AG-staining of the nucleolus organizer region. ***Am J Genetics*** 1977; 29: 490-502.
2. Ferguson Smith MA. The sites of nucleolus formation in human pachytene chromosomes. ***Cytogenetics*** 1964; 3: 124-134.
3. Mattei JF, Ayme S, Mattei MG, Governet J, Giraud F. Quantitative and qualitative study of acrocentric association in (109) normal subjects. ***Human Genetics*** 1976; 34: 185-194.
4. Centerwell WR, Merrel PR. Familial D/D t(13q,14q). ***Clinical Genetics*** 1975; 7: 91-97.
5. Yasseen AA, Aunuiz AM. High frequency of satellite association in metaphases of infertile male patients. ***Saudi Med J*** 2002; 23: 427-431.
6. Mattei MG, Soviah N, Aumes F, Mattei JF, Giraud F. Variabilite interindividuelle des assoeration enter chromosome acrocentriques. ***J Genet Hum*** 1981; 29: 181-189.

Hajj caravan 1423

Khalid O. Dhafar, *FRCS, FACS,*
Zohair J. Gazzaz, *MD, PhD,* ***Javeria Shahbaz.***

The Kingdom of Saudi Arabia (KSA) occupies four-fifths of the Arabian Peninsula, with a land area of 2 million square kilometers. The KSA holds a unique position in the Islamic world, as the custodian of the 2 holiest places of Islam, Makkah and Medina.[1] This extraordinary emeses migration is a unique forum for the study of travel epidemiology and our study is a part of it. Health services occupy a high priority in developing the agenda of the KSA, Saudi culture-devotion to Islam.[2]

Caravan, by a definition is a camper equipped with living quarters or a company of travelers journeying together specially across a desert, but in our study, Hajj caravan comprises a group of people who were Hajj pilgrims, got some illness and admitted in a tertiary care, 550 bedded, Al-Noor Specialist Hospital, Makkah, KSA and on the 9th of Dhu-Al-Hijjah corresponding to 10th February 2003 were taken to Arafat to perform Hajj by hospital management. Anyone who enters Arafat on 9th of Dhu-Al-Hijjah Waqfa or Arafat day, his Hajj is complete. A special arrangement in the presence of doctors with all emergency measures was made for such patients so that they may perform Hajj. Their medication and recommended food was also organized as it takes approximately 3-4 hours. This study includes all the Hajj pilgrims admitted in Al-Noor Specialist Hospital during Hajj 1423 Hejre, at any time before the Hajj day but still present on 9th of Dhu-Al-Hijjah in the hospital. There were 118 Hajj patients on 9th of Dhu-Al-Hijjah in the hospital, 40 patients were allowed in the morning to go for Hajj but Hajj caravan comprises of 33 patients only as 6 of them became critical at the time of departure and one refused to go. The inclusion criteria was that their vitals should be stable, they were allowed by the doctors and as well as their own will was highly considerable as there was one patient who was fit to go but refused to go.

The data collected summarizes, sex, nationality, their diagnosis, duration of stay before and after Arafat day and their general condition. They all went to Arafat at 3 p.m. and returned by 7 p.m. after Maghrib in good condition. The demographic data and clinical picture of Hajj pilgrims on Arafat day is shown in **Table 1**. The results highlight that out of 33 patients, 60% were males and 40% were females justifying the male dominancy. There was a total of 14 nationalities that accompanied the caravan. The majority was from Arab countries comprising 42.4% of which Egyptians were 24.2%. An overall condition of patients was quite stable, 18.1% had

Table 1 - Demographic and clinical characteristics of Hajj caravan (N=33).

Characteristics/parameters	n	(%)
Gender		
Male	20	(60)
Female	13	(40)
Nationalities		
Arab countries	14	(42.4)
Indo-Pak subcontinent	10	(30.3)
Others	9	(27.3)
Vitals stable at departure*		
Good†	6	(18.1)
Acceptable‡	27	(81.8)
Duration of stay before 9th Dhu-Al-Hijja		
1 or same day	6	(18.1)
2-4 days	16	(48.5)
5-7 days	7	(21.2)
> 1 week	4	(12.1)
Duration of stay after 9th Dhu-Al-Hijja		
1 or same day	14	(42.4)
2-4 days	13	(39.3)
5-7 days	3	(9.1)
> 1 week	3	(9.1)

* pulse, blood pressure and temperature at standard normal levels, †vital signs normal independently mobile and not in agony, ‡vital signs normal, nearly 1-2 postoperative, 1-day back recovered from acute situation

Table 2 - Diagnosis of Hajj caravan patients according to ICD-10.

Diagnosis	ICD-10 codes	n	(%)
Disease of musculoskeletal and connective tissue	M00-M99	8	(24.2)
Disease of respiratory system	J00-J99	7	(21.2)
Disease of nervous sytem	G00-G99	5	(15.1)
Disease of gastroenteritis	K00-K93	5	(15.1)
Cases of general surgery as hernia, amputation, acute abdomen and others	R00-R99	4	(12.1)
Disease of blood and blood forming organs	D50-D89	2	(6.1)
Disease of skin and soft tissue	L00-L99	2	(6.1)
Total		**33**	**(100)**

good and 81.8% had acceptable condition. **Table 1** also highlights the duration of stay of patients before and after Hajj day showing that majority of patients 48.4% staying for 2-4 days until 9th of Dhu-Al-Hijjah but after 9th of Dhu-Al-Hijjah maximum patients 42.4% left the hospital on the same or next day. **Table 2** shows us the presentation of different diagnosis with their ICD-10 codes.[7] There were only 7 codes in which various diagnoses fall but the diagnosis of patients with musculoskeletal and connective tissue disorder were at higher rate 24. 2%.

Our study gives us a picture of how it was made possible for the ill to perform Hajj by the hospital management. Other studies regarding Hajj,[3-6] and more than this had been conducted in past but it is a different type of study ever done for the first time in the KSA. Our study indicates that the provided selection criteria is followed closely and no undue effects were experienced by allowing patients to attend Hajj. Moreover, hospital should carefully select patients who should be allowed to go with the Hajj caravan in order to avoid unnecessary morbidity and mortality.

Received 10th February 2004. Accepted for publication in final form 12th May 2004.

From the Department of Surgery (Dhafar), Department of Health Research (Gazzaz, Shahbaz), Al-Noor Specialist Hospital, Makkah, Kingdom of Saudi Arabia. Address correspondence and reprint requests to Dr. Zohair J. Gazzaz, Head of Health Research Department, Al-Noor Specialist Hospital, Makkah, Kingdom of Saudi Arabia. E-mail: alnoorresearch@hotmail.com

References

1. Memish ZA, Venkatesh S, Ahmed QA. Travel epidemiology: the Saudi perspective. ***Int J Antimicrob Agents*** 2003; 21: 96-101.
2. Gallagher EB, Searle CM. Health services and the political culture of Saudi Arabia. ***Soc Sci Med*** 1985; 21: 251-262.
3. Elhassan OM, Hameed MIS. The pattern of general surgical problems among pilgrims admitted to King Fahad Hospital, Madinah Al-Munawarah in 1987. ***Saudi Med J*** 1990; 4: 290-292.
4. Yousaf M, Zafar MO, Maqbool M. Medical problems of Pakistan pilgrims in Saudi Arabia. ***Pak J Med Res*** 1993; 32: 172-175.
5. Yousaf M, Al-Saudi DAA, Sheikh RA, Lone MS. Pattern of medical problem among hajj pilgrims admitted to King Abdul Aziz Hospital, Madinah Al-Munawarah. ***Annals of Saudi Medicine*** 1995; 15: 619-621.
6. Al-Ghamdi SM, Akbar HO, Qari YA, Fathaldin OA, Al-Rasheed RS. Pattern of admission to hospital during Muslim pilgrimage (Hajj). ***Saudi Med J*** 2003; 24: 1073-1076.
7. International Statistical Classification of Diseases and Related Health Problem. 10th Version, Vol. 2. Geneva: WHO; 1992.

Acetylator phenotype in Iraqi patients with discoid lupus erythematosus

Rafid A. Najim, *PhD, DDV,*
Yahya Y. Farid, *BSc, PhD,*
Shihab A. Shihab, *MBChB, MSc.*

Lupus erythematosus (LE) is usually divided into 2 main types, discoid (DLE) and systemic (SLE). Discoid lupus erythematosus is a relatively benign disorder of the skin most frequently involving the face. There are hematological and serological changes in half of the patients.[1]

Polymorphic N-acetylation has been linked to variation in drug response, susceptibility to adverse reactions and increased incidence of certain spontaneous disorders including cancer.[2] The association between LE and acetylation has received much attention with conflicting results. While drug–induced lupus syndrome is more frequent in slow than rapid acetylators,[2] the association of spontaneous SLE with the slow acetylator status is controversial. Although some reports confirmed this association, other repots failed to find any association.[3] The association between DLE and acetylation has received little attention. There are only 2 reports that failed to show an association between acetylation and DLE.[4,5] The present paper examined the acetylator status in Iraqi DLE patients. Iraqi population as well as other Middle Eastern populations are characterized by a predominance of slow acetylators.[6] Therefore, it is interesting to