

Letters to the Editor

The microbiology of nasal nostril area in healthy Muslim prayers

Dear Sir,

All religions especially Islam encourages cleanness of the body. The prophet Mohammed "peace be upon him" has ordered muslim people to wash their face, hands, feet and swab the head as a preparation for praying, this is called ablution.¹ There are few individuals chronically carrying organisms considered to be pathogens. Since these pathogens do not produce an inflammatory reaction in the host, they are considered part of the normal flora in those individuals. The most widely studied pathogens are *Staph. aureus*. Nasal irrigation is an essential part for preparation of ablution for the prayers. Nasal irrigation has many important functions especially spiritual and mechanical cleansing. We think that nasal irrigation will decrease the number of microorganisms from the nostrils. Thus the rate of nasal bacterial carriage is probably lower than those who do not practice nasal irrigation. The aim of the present work is to investigate whether irrigation of the nose has an important role in abolishing or minimizing the microbes in the nostril. Ninety-one healthy muslim individuals (75 males, 16 females) were studied. Their ages ranged from 17-71 years with a mean +SD age of 36.5 years + 13.3 years. Swabs for culture were taken from the nasal nostril area from all 91 individuals. Twenty-one prayers were practicing irrigation of their noses, while 40 other prayers were not practicing. Thirty individuals were non-prayers. *Staph. aureus* nasal carrier was statistically lower in muslim prayers with nasal

irrigation compared with those with out nasal irrigation (9.5% vs. 42.5%) p <0.025. Also *Staph. aureus* nasal carrier was significantly lower (9.5%) in muslim prayers with nasal irrigation compared with non- prayers (47%) p <0.025. From this we can conclude that ablution before praying has an important significance in decreasing and minimizing the skin flora especially in the nasal and perineal area.

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2. Bennite RG. Microbiologic Considerations in Coetaneous Surgery, Fundamental Coetaneous Surgery. St. Louis, Washington DC, Toronto: CV Mosby Company; 1988. p. 136-140.
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Table 1 - The results of nasal swabs in all individuals.

Nasal Nostril	Prayers		Non-prayers n %	Total n %
	Irrigating n %	Non irrigating n %		
Organisms				
<i>Staph aureus</i>	2 10	17 42.5	14 47	33 36
<i>Staph epidermid</i>	15 71	19 47.5	13 43	47 52
<i>Streptococcus</i>	- 0	1 2.5	2 7	3 3
<i>Pseudomonas</i>	- 0	1 2.5	- 0	1 1
<i>Klebsiella</i>	- 0	- 0	1 3	1 1
n of bacteria growth	4 19	2 5	- 0	6 7
Total	21 100	40 100	30 100	91 100
n=number, Staph=staphylococcus				