

MEDICAL PROBLEMS OF SEA-TANKER CREWS

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INTRODUCTION

Singapore is at present the fourth largest port in the world, and more and more ships are visiting her year by year. Oil-tankers account for more than half the total shipping tonnage of the world. Therefore it is important that the medical profession in this country should have a good knowledge of the common medical problems which occur aboard them.

The present series of cases is made up of 10,104 seamen who received medical attention at Pulau Bukom during the years 1963-1967 inclusive. Pulau Bukom handled 3800 ships in 1967, compared with 22,000 ships for Singapore as a whole. The cases comprised officers, men and occasionally some passengers of about a dozen nationalities. About three fourths of them were British or Dutch. The rest included Chinese from Singapore, Malaysia and Hong Kong; Spaniards; French; Germans; Swedes; Norwegians; Indians; Japanese; Greeks; Turks; United States citizens and West Indians.

TABLE I

TOTAL NUMBER OF CREW ATTENDED TO.

1963	1934	cases
1964	1575	cases
1965	2020	cases
1966	2116	cases
1967	2459	cases
Grand Total	10104	cases

FATALITIES

There were four deaths in the series. Three of them were due to head injury. One of these was a case of a sailor who fell from the gangway leading up to the ship while in an inebriated state. Another death was caused by the swinging hook of a crane, and might have been prevented had the man been wearing a safety-helmet. The fourth death was caused by a sudden heart attack.

TABLE II

ANALYSIS OF CASES

	1963	1964	1965	1966	1967	Total	Percentage
Skin	156	174	187	145	225	887	8.7%
Gastro-intestinal	154	104	109	106	143	616	6%
Injuries	128	115	102	140	146	631	6.2%
Venereal	79	80	101	112	127	499	4.9%
Respiratory	49	43	30	49	55	226	2.2%
Renal	35	27	47	45	86	240	2.3%
Neurosis	6	5	12	7	16	46	.4%
Vaccinations & inoculations	980	754	1115	1212	1300	5361	53%
Eye	29	45	34	35	32	175	1.7%
Others	318	228	283	265	329	1423	14%
Total	1934	1575	2020	2116	2459	10104	

TYPES OF CASES SEEN

An analysis of the cases seen is given in Table II.

SKIN DISEASES

Skin diseases were most numerous in the series, and accounted for 9% of the cases. The diseases included impetigo, boils and carbuncles, seborrhoeic dermatitis, oil acne and contact dermatitis. Intertrigo of the groins was common. Some such cases were caused by parasitic infestations like ringworm & monilia. Some others were probably due to allergy or hypersensitivity to detergents used to wash underclothes.

Categories of crew members especially prone to skin diseases included greasers, engineers and others working in the engine-room. It appears that white races tend to develop contact dermatitis more readily than coloured races, although no complete study was made to prove this.

GASTRO-INTESTINAL DISEASES

Gastro-intestinal diseases were third in frequency with 6%. Some of the cases seen were probably functional disorders. Not uncommonly young sailors came up complaining of vomiting after meals during the first few months of their first tropical tour of duty. The exacting climatic conditions and sometimes tediousness of the refrigerated food on board the tankers were probably significant factors. Chinese sailors seemed especially prone to epigastric or upper abdominal pains. Very few cases of acute abdomen were seen, but they included about a dozen cases of acute appendicitis. One was a man who walked into the Clinic casually saying that he had severe abdominal pains one week previously, but that he felt all right now and had come just to be certain he was completely well. He had a huge, sealed off appendicular abscess, the existence of which was confirmed at operation. There were, in addition, a few cases of bleeding peptic ulcer.

Doctors looking after sea-tanker personnel should be especially careful that they do not miss acute abdominal cases. The severity of the symptoms is not always a reliable guide to the diagnosis. One should always take a careful clinical history and do a thorough examination. Simple laboratory tests, such as the erythrocyte sedimentation rate and the leucocyte count, are often useful.

INJURIES

Injuries accounted for 6.2% of the cases seen. Most of the cases were relatively minor. Severe cases included fractures and deep wounds. Eye injuries were quite frequent. Many such cases were eminently preventable. Many were caused by foreign bodies getting into the eye because no goggles were used during the chipping off of old paint or the spraying on of new paint. Some others were caused by sparks from welding, and also could have been prevented by adequate eye-protection.

A few injuries, fortunately minor, were due to jet-guns, which release air, water, or oil at enormous pressures of 600 lb/sq. inch or more. Jet-guns are used to clean the boilers of ships, among other things. The man using such a gun usually has to work in a very small confined space. If he is not very careful, he may press the trigger by accident or he may stumble while he is operating the gun, shooting himself as a consequence. Very severe injuries and even deaths can result. Hence it is imperative that people using such potentially dangerous instruments should be properly trained in their use and warned of their dangers.

A few accidents were indirectly due to inclement weather, which caused the ship to roll and doors to slam on fingers and toes of unwary seamen.

VENEREAL DISEASES

What is somewhat surprising is the fact that venereal diseases account for only 5% or one-twentieth of the cases seen. The life of the tanker personnel is more lonely than that of the crew on board a passenger liner. Social contacts are more restricted. Often the ports of call of an oil-tanker are not the metropolitan cities which are tourist attractions but drab refinery towns. Such circumstances can lead many people easily into sexual promiscuity, and undermine their resolve not to contract venereal disease. In several ports, including this one, prostitutes often beguile unwitting seamen by climbing aboard the ships anchored on the roads or at the wharves. All tankers normally carry protective kits on board, but many sailors do not bother to use them.

One noteworthy feature observed in this series was the comparative rarity of detected syphilis. The vast majority of cases seen were either gonorrhoea, chancroid or non-specific urethritis. It is difficult sometimes to differentiate non-specific urethritis from incompletely

treated gonorrhoea. Seamen often clamoured for a blood test immediately or soon after an exposure to venereal disease. We adopt the policy of usually doing blood tests about two months after the onset of symptoms suggestive of venereal disease or routinely just before the person was due for home-leave.

It must be remembered that venereal diseases could occur not only from a seaman's liason with prostitutes, bar-girls and the like but also from homosexual relationships, often with fellow crew-members.

In proportion to their numbers, fewer Chinese seamen were treated for venereal disease than their Western counterparts. Homosexuality also seemed to be less rife among Asian sailors than among European ones.

GENERAL OBSERVATIONS

Times does not permit me to comment in detail on the numerous other facets of the wide spectrum of diseases observed in this series. Many of these facets are interesting and worthy of deeper study.

Contrary to popular opinion, the incidence of neurosis seemed to be quite low. Cases whom I considered to have purely neurotic complaints without any detectable organic basis were relatively few in number. There were also few seamen who could definitely be branded as malingerers. My impression of tanker-crews after five years of almost daily contact with them is that they are, on the whole, a group of honest and hardworking individuals who do not complain or shirk work too readily. Habitual drunkenness is not common among them. Opium addiction appears virtually extinct among Chinese sailors.

It is never true, however, that there are sometimes crew-members who wish to leave their ship for no justifiable reason or captains who hope to use the doctor as the tool to get rid of a troublesome subordinate. The doctor should be firm but tactful and his diagnostic skill may often be severely taxed in screening such people.

PRINCIPLES OF TREATMENT

At the present many tankers ply between Singapore and the Middle East. The trip between these two places takes about two weeks. From Singapore ships go often to areas like Vietnam and the other parts of Indonesia, where medical facilities are often inadequate. Therefore the

doctor must remember that it may be several days or weeks before a patient could see a doctor again if his disease continues. It is important that the doctor should find out when the patient's ship is leaving and where she is going to in planning treatment. Drugs should be carefully chosen to ensure good chances of efficacy and a minimum of untoward side-effects. The writer tends to give drugs which have been well-tried, are relatively non-toxic, and for a longer duration than he would for patients he could follow up regularly.

Patients should be carefully warned about important side effects of the medicines given. For instance, the method and washing off of daily penicillin applications or penicillin should preferably be demonstrated, and then related in detail to the patient and carefully written down as instructions to him, in order to avoid undue agony on board or the loss of part of the penis.

It is desirable, in my opinion, for the doctor to write in detail and legibly what medicines he is giving to the sea-farer. The scribbling of unmeaningful words like "Medicines and ointments given" or "X-ray taken" or "A blood count done" is going to undermine the ability of the next doctor a patient sees for his follow-up. It is true there will be some exceptions, when strict secrecy has to be preserved. The keeping of complete records for a chronic disease is always a problem. When a seaman changes his ship, his medical papers are usually left behind. The doctor should ask a seaman coming up for a chronic disease when he is going home or changing ship. If he is going to do one or the other soon, the medical attendant will often be doing a great service to his patient if he makes a copy of the salient points in his medical papers and adds his own observations, and asks the patient to hand the document to the latter's next medical adviser.

KNOWLEDGE OF CONDITIONS ON TANKERS

Doctors dealing with cases from ships could improve standards of medical care if they have some knowledge of the conditions on tankers of what the various categories of officers and crew do. I am not sure how many doctors treating tanker-crews regularly know, for instance, what a "donkeyman" or a "deck-apprentice" really is. Doctors who prescribe sleeping pills at night to an officer who has to go on night-watch can help unknowingly to bring about marine disasters of the largest magnitude. Likewise, doc-

tors who ask a fireman-greaser to work as a steward as a form of light duty may not be fully understanding the implications involved. Sometimes it is difficult to find "light duty" for certain categories of seamen, in which case getting them signed off may be best.

Medical practitioners should also be aware that no ship is allowed to sail without a qualified radio-operator or an officer with a master's ticket on board. Hence the decision to take one or the other off ship should be made after full deliberation. A delay of a few hours could mean a financial loss of thousands of dollars to the parties concerned. While the patient's welfare should always be uppermost in the doctor's mind, all these considerations also deserve attention, as he cannot afford to remain oblivious of the society in which he functions.

CONCLUSION

A doctor will find that the care of tanker-personnel is at once challenging, interesting and problematical. His expertise and patience are often taxed to the full. He cannot always rely on the hospital specialist to help him solve his problems, as the ship may not stay in port long enough for him to do so without getting the patient signed off.

Singapore is well-suited to be a centre of research into the medical problems of oil-

tanker crews. We have to work out the particular medical problems confronting us in this country ourselves, as the experiences of doctors looking after tanker-personnel in other parts of the world may be quite different from our own experience. Regimens of treatment and standards of health have often to be considerably modified from those in standard medical text-books, to suit the special circumstances in tankers.

These problems will continue to assume greater importance as Singapore expands its port and becomes more of a manufacturing centre. Just as the Harbour Board is trying its best to improve port facilities to attract more shipping, we, the medical profession in Singapore, should likewise endeavour to raise the standards of the medical care of personnel of ships all the time.

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