CASE REPORT

Nasal and Thumb Myasis: A Case Report

Neyamat Ullah Khan[1], S M Khorshed Mazumder[2], Md Daulatuzzaman[3]
Md Ashfaquzzaman Sikder[4], Fuad Mohhammad Shahid Hossain[5]

Introduction :

The term myasis is derived from the greek word "myin" meaning FLY[1]. It causes infestation of live human and vertebrate animals with dipteral larvae which at least for a certain period, feed as the host's dead or living tissue, liquid body substances or ingested food[2]. Low socioeconomic status, immuno-compromised state, mental retardation and unhygienic living conditions also may be the contributing factors responsible for myasis.

Case Report :

A 70 years old female hailing from Bikrampur was admitted in to this hospital on October 2012. Her attended said that she was mentally retarded and was unattended for a long time. She fell down from stairs and got injured in right thumb and nose resulted in bleeding from the nose and right thumb. She also complained of foreign body sensation, purulent nasal discharge, nasal obstruction and also foul smelling discharge from thumb for 15 days.

More than 40 maggots were removed from her nose and thumb. She was managed conservatively and became complete free of maggots. The patient came with the complaints of foreign body sensation in the nose, purulent nasal discharge mixed with blood for 15 days, nasal obstruction, accidental trauma to the right thumb followed by foul smelling discharge.

According to the patient's statement she was mentally retarded and was unattended for long time. She was reasonably well 15 days back then she fell down from the stairs and she got injury to the nose and right thumb resulted in bleeding from the nose and right thumb. But she didn't visit any physician. She also complained of foreign body sensation, purulent nasal discharge and nasal obstruction and foul smelling discharge from the right thumb for 15 days.

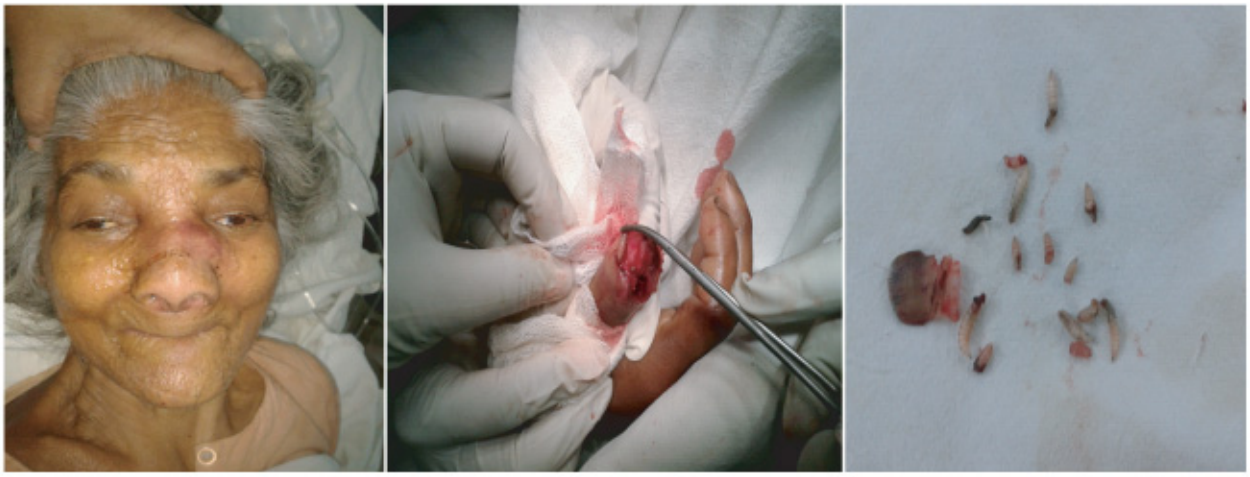
She was non diabetic, normotensive and non asthmatic. Her bowel and bladder habit is normal. With this above complaints she admitted in Holy Family Red Crescent Hospital for better management. There was no significant past medical or surgical history. She is a divorcee and she doesn't have any children. She was also unattended for a long time. She came from low class family and lives in a teen shed house. She is menopaused for about 30 years.

On examination: no abnormality detected in ear. Anterior rhinoscopy revealed multiple maggots in her nasal cavity-vestibule and walls are ulcerated and unhealthy. Naso endoscopy : not done due to non co-operation of the patient. No abnormality detected in throat. Ulceration of the right thumb & purulent foul smelling blood stained discharge with multiple larvae seen.

1. Assistant Registrar, Department of ENT, Holy Family Red Crescent Medical College Hospital
2. Professor and Head, Department of ENT, Holy Family Red Crescent Medical College Hospital
3. Professor, Department of ENT, Holy Family Red Crescent Medical College Hospital
4. Associate Professor, Department of ENT, Holy Family Red Crescent Medical College Hospital
5. Resident, Department of ENT, Holy Family Red Crescent Medical College Hospital

Treatment on admission :

Diet : Regular.
Inf. 5% DNS (1L) +Inf. Hartsol (1L) i/v @20 d/min.
Inj. Ceftriaxone (1gm)>1 vial i/v-stat & 12hrly.
Inj. Flucloxacillin (500mg)>1 vial i/v-stat & 6hrly
Paracetamol suppository (500mg) 1 stick P/R - stat
Antazol nasal drop(0.1%) 3drops in each nostril-TDS
Neobacrin ointment 4 to 5 times in each nostril apply locally-2 hrly.
Inj. Ranitidine (50mg) 1 vial I/v -stat



After 2 days of conservative treatment the patient was sent to OT and removal of maggots from the nose was done by suction and forceps followed by multiple nasal irrigation were done with plenty of saline.

Thumb was managed by removal of the maggots by forceps under local anesthesia. Multiple saline irrigation done with proper debridement of wound.

Discussion :

Myasis is not an uncommon parasitic infestation in the tropics and subtropics, and due to international travel, cases are also encountered outside the endemic region in both Europe and North America[3]. Myasis producing larvae attack three main parts of the body i.e Cutaneous tissue (furuncular and creeping), body cavity and organs[3,4].

Lesions with foul discharge or blood attract and stimulate the female insect to deposit eggs on them[5]. However, larvae may burrow into and destroy the tissue. Rapid destruction of adjacent tissue, including bone, may result in the death of the host. Tissue destruction may occur by mechanical means and by the production of collagenase[4].

Myasis is also frequently seen in adults, specially those who are mentally retarded[5]. Our patient is also mentally retarded, immuno-competent adult. The main symptoms of nasal myasis are foreign body sensation and itching in throat being followed by caugh and nasal manifestation such as nasal discharge, sneezing, dyspnoea and stridor[6].

The diagnosis of myasis is made by seeing the larval movement. Since the nasal cavity has inaccessible areas, removal of maggots can be difficult by conventional instrument and several settings are required. To overcome this problem, a nasal endoscope can be used for a direct vision[7].

In this case more than 40 maggots were removed from nose and right thumb. The patient was managed by irrigating the maggots by suction and

forceps. Nasal irrigation was done several times with a large amount of saline. Besides oral antibiotics were also given prophylactically to prevent secondary infection. The patient had excellent recovery after removal of maggots in two weeks of hospital admission.

Conclusion :

Although nasal myasis is extremes uncommon in the field of otolaryngology, specially in the western world. The possibility of its occurrence always exists. The treatment is simple and cure is rapidly obtained once the diagnosis is made.

References :

1. Adhikari P, Sinha BK, Bhattarai H, Shrivastav RP. Myiasis in a postoperative mastoid cavity. Nepal Med Coll J 2007; 9: 284-5.
2. Bhatt AP and Jayakrishnan A. Oral myiasis : a case report. Int J. Paediatr. Dent 2000; 10: 67-70.
3. Nouttsis C and Millikan LE. Myiasis. Dermatol Clin 1994; 12: 729-36.
4. Ciftcioglu N, Altintas K, Haberal M. A case of human orotracheal myiasis caused by Wohlfahrtia magnifica. Parasitol Res 1997; 83: 34-6.
5. Lokman Uzun, Fikret Cinar, Levent Bekir Bedir, Turan Aslan, Kursat Altintas. Radical mastoidectomy cavity myiasis caused by Wohlfahrtia magnifica. J Laryngol Otol 2004; 118: 54-56.
6. Masoodi M, Hosseini K. The respiratory and allergic manifestations of human myiasis caused by larva sheep bot fly (Oestrus ovis): a report of 33 pharyngeal cases from southern Iran. Ann Trop Med Parasitol 2003; 97: 75-81.
7. Erdinc Aydin, Sefika Uysal, Babur Akkuzu, Fusun Can. Nasal myiasis by fruit larvae: a case report. Eur Arch Otorhinolaryngol 2006; 263: 1142-3.