# CVOID19- Air in the Neck and Soft tissues of upper Chest Due To Suicidal Attempt

Dr Mayank Vats <sup>1</sup>, Dr Bassam, Mahboub <sup>2</sup>, Dr Walid Mahmood <sup>3</sup>

<sup>1</sup>Senior Specialist, <sup>2,3</sup> Consultant Pulmonologist,

Department of Pulmonary and Sleep medicine Rashid hospital, Dubai, UAE

**Key words:** subcutaneous haematoma, subcutaneous Emphysema, , Bilateral Basal Pneumonia, COVID 19, Major Depression, Suicidal attempt, Acute depression

34 yrs male came in ER with attempt to suicide after being suspected  $\mbox{\ensuremath{v/s}}$ ? diagnosed as Corona infection On arrival he had lacerated wound on his neck which was sutured by ER physician . No known comorbidity . Complain of ?? Fever before but no documentation in hospital . No history of previous medical comorbidity / contact with confirmed COVID case / Recent travel . patient was seen by General surgery team who discharged but advised to refer to them again if there is wound swelling or patient develops difficulty in breathing. Case was also referred to Psychiatry team for evaluation and management

vitally stable, anxious, non-cooperative, examination of neck: 10 sutures over the wound Which is about 9 cm from anterior neck towards the left side with no obvious swelling, non-tender. Normal Respiratory, cardiac abdominal and extremities examination.

Differential Diagnosis: Pneumothorax, Road Traffic accident or industrial accident, Surgical emphysema, Pneumomediastinum

- 1. COVID 19 positive patients with suicidal attempt by neck laceration due to depression or acute panic when patient came to know that he is highly suspicious or positive for corona virus. he tried to attempt suicide considering the grave consequences of the corona infection . and had lacerated wound in the front of neck in order to try to cut his trachea. CT-neck with contrast reported: Soft tissue swelling with subcutaneous haematoma in neck along with subcutaneous emphysema involving pre-laryngeal, pre and para-tracheal space
- 2. There was no history of neck trauma or road traffic accident --- Road traffic or any industrial accident could easily be ruled out
- 3 . Chest X ray ruled out any pneumothorax or pneumomediastinum which could also lead to surgical emphysema in the neck and CT scan also did not show any evidence of pneumothorax or pneumomediastinum- hence it were ruled out confidently

## Discussion:

This case report shows the intense negative impact of COVID 19 Fear on the psychological aspect of patient that

when he had suspicion of corona virus infection he tried to end his life by self-inflected suicidal attempt by lacerating trachea. fortunately, he did not die and brought to hospital and survived.

globally many cases of similar type has happened due to corona pandemic and people have grave misconception that once they have corona positive it will definitively lead to death, hence they become panic and depressed. . in US and other countries as well doctors (1,2) and patients committed or attempted suicide after coming as CORONA positive just due to Panic and fearfulness. or unable to cope with the news. some of them may have minor underlying psychological issues. in India, recently 2 patients s committed suicide due to their corona positive In middle east region, majority of the status (3,4) populations are migrant workers who came her for search of job, they are less familiar in their new environment and hence are prone to various socio-psychological stress in such a devastating pandemic situation for their own livelihood and the concerns for family in their country. COVID-19 outbreak imposed many restrictions on routine activities including lock down, social distancing, pay cut or pay loss with consequent economic crisis or their wish to go back to home country but due to lockdown, they got stuck in the foreign country with no social or economic support.

Immediate concerns faced by such migrant related to food, house, Healthcare, fear of being infected and death, loss of salary, concerns about the family, anxiety and fear and depression and developments of negative feelings and suicidal ideations. These could be the possible reason in our patient who attempted suicide after being highly suspicious for COVID 19.

Even well-educated society shows stress, fear and negative attitude after such pandemics. A review showed that current research focused on assessing several aspects of mental health affected in Health care workers (HCW) due to COVID-19. Several socio-demographic variables like gender, profession, age, place of work, department of work and psychological variables like poor social support, self-efficacy were associated with increased stress, anxiety, depressive symptoms, insomnia in HCW. There is increasing evidence that suggests that COVID-19 can be an independent risk factor for stress in HCW (1).

Among the healthcare workers also, the front-line workers involved directly in handling these patients are at greater risk than others. The reasons for such adverse psychological

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outcomes in them range from excessive workload/work hours, inadequate personal protective equipment, overenthusiastic media news, feeling exhausated, unprotected and mentally depleted (2,3).

Another important reason for such psychological impact is the infection rate among medical staff. The sudden reversal of role from HCW to a patient might lead to frustration, helplessness, Adjustment issues, stigma, fear of discrimination in the medical staff (4)

Despite the low mortality rate of 2%, the COVID-19 virus has a high transmission rate and the mortality is higher than that caused by severe acute respiratory syndrome (SARS) and Middle East Respiratory syndrome (MERS) combined (5)

#### Recommendations and conclusions:

All possible measures must be taken to address social, psychological and economic need of the migrant workers including food, housing and other relief material available including the salary on time, job assurance and to provide them facilities to get connected with their family for their psychological wellbeing. Need for social distancing, early detection and protocol-based treatment must be followed and they must be educated about the disease in details that only 10-15 % patients would have serious disease and then mortality is around 5-9% and hence not to get scared with corona , rather we must fight with corona . Simultaneously government must ensure their psychological and physical wellbeing and arrangement often requirement of the daily living so that they won't suffer additional stress.

strengthening of psychological services for COVID patients would be an additional steps to avoid such unavoidable circumstances and the mental wellbeing of patients

### Images:



Image 1- CXR at admission:: bilateral minimal Patchy opacities are noted in both lower zones. poorly defined

vertical air streaks in bilateral neck zone. Rest of the CXR unremarkable

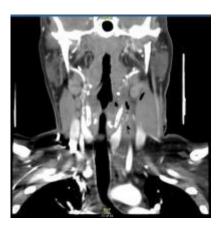


Image 2- Coronal view CT scan neck - Soft tissue swelling with subcutaneous haematoma in neck along with subcutaneous emphysema involving pre-laryngeal, pre and para-tracheal space.



**Image 3- CT scan neck - Coronal reconstruction :** Soft tissue swelling with subcutaneous haematoma in neck along with subcutaneous emphysema involving pre-laryngeal, pre and para-tracheal space.



**Image 4- CT scan nexk - Axial section :** Soft tissue swelling with subcutaneous haematoma is noted in neck along with subcutaneous emphysema involving pre-laryngeal, pre and

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para-tracheal space. No evidence of any arterial or venous injury.

No evidence of contrast extravasation. No evidence of fracture.



**Image5- CT scan neck - Axial section :** Soft tissue swelling with subcutaneous haematoma is noted in neck along with subcutaneous emphysema involving pre-laryngeal, pre and para-tracheal space. No evidence of any arterial or venous injury.

No evidence of contrast extravasation. No evidence of fracture. No evidence of tracheal compression



Image 6- CXR PA - at discharge: Near complete resolution of the initial patchy infiltrates

### References:

 Spoorthy MS, Mental health problems faced by healthcare workers due to the COVID-19 pandemic- a review, Asian Journal of Psychiatry (2020), doi:

https://doi.org/10.1016/j.ajp.2020.102119

Cai, H., Tu, B., Ma, J., Chen, L., Fu, L., Jiang, Y., Zhuang, Q., 2020. Psychological Impact and Coping Strategies of Frontline Medical Staff in Hunan between January and March 2020 during the Outbreak of Coronavirus Disease 2019 (COVID-19) in Hubei, China. Med Sci Monit 26,e924171.

- 3. Lee et al, 2018; Lee, S, M., Kang, W, S., Cho, A., Kim, T., Park, J, K., 2018. Psychological impact of the 2015 MERS outbreak on hospital workers and quarantined hemodialysis patients. Compr Psychiatry 87, 123 127.
- 4. Rana et al., Rana, W., Mukhtar, S., & Mukhtar, S. 2020. Mental health of medical workers in Pakistan during the pandemic COVID-19 outbreak. Asian Journal of Psychiatry 51, 102080.2020.
- 5. Mahase, E., 2020. Coronavirus covid-19 has killed more people than SARS and MERS combined, despite lower case fatality rate. BMJ 368, m641.2020.

#### **Additional References:**

https://www.telegraph.co.uk/global-health/science-and-disease/coronavirus-indian-man-died-suicide-becoming-convinced-infected/

https://indianexpress.com/article/cities/mumbai/mumbai-coronavirus-patient-suicide-nair-hospital-6363542/

https://indianexpress.com/article/cities/mumbai/coronavirus-patient-commits-suicide-at-seven-hills-hospital-6402462/

https://www.nytimes.com/2020/04/27/nyregion/new-york-city-doctor-suicide-coronavirus.html

https://www.goal.com/en/news/reims-club-doctor-gonzalez-commits-suicide-after-coronavirus/1vm93t20q9ugd1ssvgymbfifex