A review of skin infectious disease patients aged 65 and older in intensive care unit referred to dermatology in a single institution.

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Background

- The number of elderly people(aged 65 or older) has been steadily increasing and along with this, the number of elderly patients receiving treatment in the Intensive care unit(ICU) is also increasing.
- According to previous literature, the age group with the most referrals from the ICU to the dermatology department was the elderly
- The most frequently referred disease among the elderly was infectious diseases.

Background

- Patients being treated in ICUs often have multiple devices attached to them for surveillance, medication administration, and physiologic support, and they are often immobile.
- It is thought that the incidence of infectious skin diseases in ICUs may be different from that in the general population and hospital wards.
- There are a few studies on skin diseases or skin infections in the geriatric population, but there are no studies on skin infections in elderly patients in the ICU

Objective

 Patients receiving treatment in an ICU are thought to have differences in the pattern of infectious skin disease from the general population and general ward patients in elderly.

Methods

- Study subjects
 - Elderly patients aged 65 years or older
 - Admitted to the ICU at Sanggye Baek Hospital, Inje University,
 - Referred to the dermatology department for skin symptoms.
 - The study period spanned 13 years from January 2009 to December 2021
- 195 patients who were referred to the dermatology department for skin symptoms and diagnosed with infectious skin disease were retrospectively reviewed.



Methods

Spectrum of infectious skin diseases

- Fungus
 - Confirmed by KOH microscopy or fungal culture test, or clinically diagnosed based on skin lesions, and showed improvement after antifungal treatment.
- Bacteria
 - Confirmed by bacterial culture or histopathological examination, or clinically diagnosed based on symptoms such as fever, erythema, and exudation
- Virus
 - Herpes zoster and herpes simplex
 - Confirmed by Tzanck smear showing multinucleated giant cells, or clinically diagnosed based on clustered vesicular or scaly lesions
- Parasite
 - Confirmed by KOH microscopy



Results

- The mean age of the patients was 77.0±7.0.
- Dermatology referral frequency was highest in summer (n = 60, 30.8%)
 - There were no significant differences between seasons.
 - Winter (n = 44, 22.6%)
 - Spring (n = 45, 23.1%)
 - Autumn (n = 46, 23.6%)

Results

- Fungi(n=111, 57.0%; Tinea corporis, Tinea inguinalis etc) were the most common source of infection.
 - Viruses(n=63, 32.3%; Herpes simplex, Herpes zoster)
 - Bacteria(n=26, 13.3%)
 - Scabies(n=8, 4.1%).

Conclusion

 Recognizing that fungal and viral infections, as well as pressure ulcers, are common in ICU patients, early detection through examination will help with patient skin care. (Newly developed lesion of vesicle, Lesion located on flexor area)

 The results of this study are thought to provide useful information for skin care, prevention of skin infections, and early diagnosis of elderly patients in ICU.

Conclusion

Limitation

- Retrospective analysis of patients referred to the dermatology department
 - Study results may not represent the overall pattern of skin diseases in all ICU patients.
- Some skin diseases may have been present but not referred due to their perceived low significance in critically ill patients.

References

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