

Leech management before application to patient for preventing healthcare-associated infections: results of a nationwide survey

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Background

- Leech therapy is widely used in plastic/reconstructive microsurgery to aid salvage of failing flaps, replanted digits, ears or lips
- Infectious complications are frequent (4.1 to 36.2%)^{1,2}: mostly caused by aeromonads = obligate symbiont of leeches' digestive tract
- Legal status of medicinal leeches varies among countries

→ **Antibiotic (ATB) prophylaxis is recommended**

→ **Unclear practices of leech maintenance before use**

Objectives

To assess the current extent of use of medicinal leeches, and to investigate practices of prevention of healthcare-associated infections:

Nationwide survey conducted in all the French University Hospitals

Material & Methods

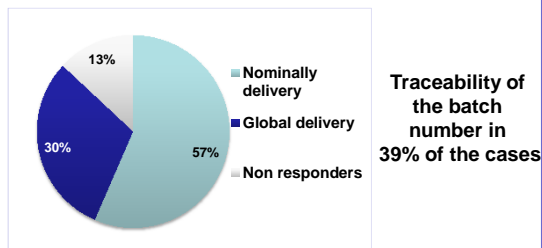
- A questionnaire sent to the Pharmacy Departments of all the centers belonging to the “**CHU network**” including all the 32 French university hospitals and related centers
- Data collected:
 - mode of delivery/conditions of storage
 - leech external decontamination
 - microbiological controls
 - ATB prophylaxis

Results

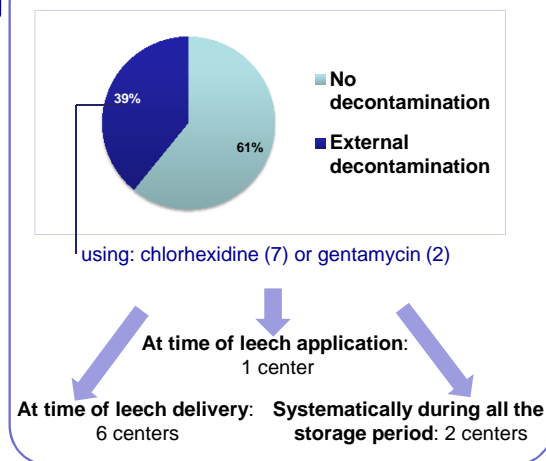
- **28 (87.5%) out of the 32 centers of the CHU network filled the questionnaire**

Mode of leech delivery:

- 23/28 (82%) practiced leech therapy mostly with a centralized storage in the pharmacy



Leech external decontamination:

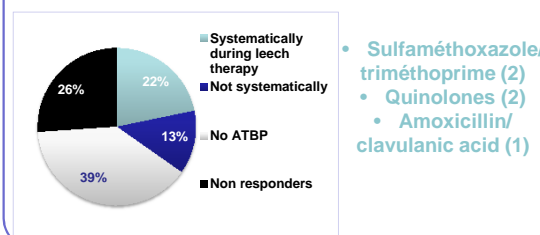


Recurrent microbiological controls of the water storage:

2 centers: just after leech reception (1) and every month (1)

Antibiotic prophylaxis:

A protocol of ATBP was systematically administered in only 5/23 centers (22%):



Discussion

- In order to reduce the risk of infection related to leech therapy, measures of prevention before application to patient are necessary
- A multidisciplinary collaboration between pharmacists, microbiologists, infectious specialists and infection control team is highly advised to prevent infection and to monitor healthcare-associated outcomes

Guidelines on the management and use of leeches are needed in hospitals

References

1. Sartor and al., Clin Infect Dis. 2002;35(1): E1-5
2. Bauters and al., Pharm World Sci PWS. 2007;29(3):122-5

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You have any leech infection in your hospital, we are interested, you can contact us !