

Post exposure prophylaxis after occupational HTLV exposure

پیشگیری از انتقال شغلی HTLV در جراحی و پرستاری

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متخصص بیماریهای عفونی

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INTRODUCTION

- The human T-lymphotropic virus type I (**HTLV-I**) is a retrovirus that infects 10 to 20 million people worldwide
- HTLV-I is associated with disease in only approximately 5 percent of infected individuals.

DISEASE ASSOCIATIONS

- The majority of HTLV-I-infected individuals will remain asymptomatic
- Adult T cell leukemia-lymphoma (**ATL**)
- HTLV-I-associated myelopathy (**HAM**), also known as tropical spastic paraparesis (**TSP**).

TRANSMISSION

- ❑ Breast feeding
- ❑ Sexual transmission
- ❑ Blood transfusion
- ❑ Tissue donation
- ❑ Injection drug use

Promising public health initiatives to prevent HTLV-I and HTLV-II infection include:

- ❑ routine screening of blood transfusion
- ❑ protected sex
- ❑ avoidance of breastfeeding

The Centers for Disease Control wrote a position paper for counseling persons infected with HTLV-I and HTLV-II

- ❑ share the information with their physician
- ❑ refrain from donating blood, semen, body organs or other tissues
- ❑ refrain from sharing needles or syringes with anyone
- ❑ refrain from breastfeeding infants
- ❑ consider the use of latex condoms to prevent sexual transmission

Centers for disease control has set no guidelines for postexposure prophylaxis of operating room personnel exposed to these bloodborne diseases.

Human T-Cell Lymphotropic Virus Type 1 Exposures Following Bloodborne Virus Incidents in Central Australia, 2002–2012

BRIEF REPORT • CID 2014:59 (1 July)

Occupational Exposure Injuries and Follow-up

Type of Exposure	Total No. of Exposure	No. of Exposures with follow up serology	Transmission Rate	Duration of follow-up
Hollow-bore needlestick	57	27	0	116
Solid sharp	11	5	0	124
Mucous Membrane	24	14	0	97
Bite wound	4	3	0	117
Other	10	4	0	142
All	106	53	0	117

Discussion

- ❑ Blood transfusion + Injection drug use → Transmission from occupational blood exposure
- ❑ The sole published case report of occupationally acquired infection is of a midwife working in West Africa who had been exposed to infected blood while assisting in childbirth.
- ❑ Little is known about the role of ART
- ❑ In general, the results of ART in HTLV-1 have been disappointing
- ❑ The role of PEP in HTLV based on little clinical evidence and is only considered in high-risk exposures

Conclusion

- ❑ We found no evidence of seroconversion in 53 exposed healthcare workers with follow-up serology, despite only 3 having received PEP.
- ❑ We suggest that reassurance and follow-up without PEP is reasonable for all but massive exposures, where PEP with ART may be considered.

محافظت نخستین اقدام پیشگیری است!

- شستن دست‌ها به طور کامل قبل و بعد از مراقبت بیمار با آب و صابون
- استفاده از وسایل حفاظت فردی مناسب (دستکش، گان، چکمه، عینک محافظ و ماسک)
- پوشیدن دستکش در زمان هر گونه رگ‌گیری شامل شریانی یا وریدی
- توجه به موارد ذیل، در هنگام کارکردن با وسایل تیز:
 - فراهم کردن فضای امن با دسترسی راحت به ظرف مخصوص دور انداختن وسایل تیز
 - دور انداختن وسایل نوک تیز استفاده شده در Safety Box
 - عدم سرپوش‌گذاری مجدد سوزن‌ها
 - استفاده از وسایل ایمنی مناسب