THE INTESTINAL CRYPTOSPORIDIOSIS IN HIV/AIDS PATIENTS WHO HAVE HOMOSEXUAL BEHAVIOUR

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ABSTRAK

Cryptosporidium adalah penyakit parasit yang disebabkan oleh Cryptosporidium, parasit protozoa. Penyakit ini menyebar melalui rute fekal-oral. Di Indonesia, penyakit ini mudah menyebar karena faktor sanitasi yang buruk dan lingkungan yang endemis parasit intestinal.Tujuan penelitian ini adalah untuk mengetahui prevalensi kriptosporidiosis usus di antara pasien HIV/AIDS yang memiliki perilaku homoseksual. Penelitian ini adalah desain cross sectional. Ini merekrut pasien laki-laki HIV/AIDS dirawat di Rumah Sakit Dr Soetomo Surabaya Umum yang disajikan dengan diare kronis untuk dikonfirmasi Cryptosporidium infetion selama satu tahun. Suatu asam versi modifikasi noda cepat teknik Ziehl Neelsen digunakan untuk pewarnaan Cryptosporidium. Lima pria homoseksual dan 88 orang non homoseksual direkrut. Tiga orang di antara pria homoseksual (60%) dan 39 laki-laki di antara pria homoseksual non (42%) adalah Cryptosporidium positif. Hasil studi menunjukkan bahwa perilaku seksual merupakan faktor risiko yang signifikan untuk diare cryptosporidial. ***(FMI 2012;48:75-76)***

Kata kunci: *HIV/AIDS, kebiasaan homoseksual, kriptosporodiosis usus*

ABSTRACT

Cryptosporidiosis is a parasitic disease caused by Cryptosporidium, a protozoan parasite. It is spread through the fecal-oral route. In Indonesia, the disease is easily spread because of poor sanitation and environment endemic intestinal parasites. The objective of this study is to know prevalence of intestinal cryptosporidiosis among HIV/AIDS patients who have homosexual behaviour. The study was a cross sectional design. It recruited HIV/AIDS male patients hospitalized at Dr. Soetomo General Hospital Surabaya who presented with chronic diarrhoea in order to confirmed Cryptosporidium infetion during one year. A modified version acid fast stain of Ziehl Neelsen technique was used for staining Cryptosporidium. Five homosexual men and 88 non homosexual men were recruited. Three men among homosexual men (60%) and 39 men among non homosexual men (42%) were Cryptosporidium positive. The study result suggests that sexual behaviour is a significant risk factor for cryptosporidial diarrhoea. ***(FMI 2012;48:75-76)***

Keywords: *HIV/AIDS, homosexual behaviour, intestinal cryptosporidiosis*

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INTRODUCTION

Cryptosporidiosis is parasitic disease caused by Cryptosporidium, a protozoan parasitic in the phylum Apicomplexa. It affects the intestines and is typically an acute short–term infection. Cryptosporidium was recognized as an important cause of community gastroenteritis. In general community, cryptosporidial diarrhea is ussually self limiting gastroenteritis. Cryptosporidium can be an opportunistic infection in immunocompromised individuals such as HIV/AIDS patients, and it can be a devestating illness, the symptoms are particulary severe diarrhea and often fatal. It has a significant impact on patients' morbidity and mortality (Hellard et al 2003, CDC & Prevention 1999, Gumbo et al 1999).

Cryptosporidial infection can be spreaded through fecal-oral route, from faecally contaminated food and water, from animal-person contact, via person to person contact or via wild life. Any sexual practice that brings a person into oral contact with the faeces of an infected person is also considered a high-risk for exposure to Cryptosporidium (CDC & Prevention 1999, Gumbo et al 1999).

However, none of the study have been measuring the prevalence and risk factor of homosexual behaviour leading to intestinal cryptosporidiosis in HIV/AIDS patients.We report this study that aimed to measure the prevalence and risk factor of homosexual behaviour for intestinal cryptosporidiosis among HIV/AIDS patients.

MATERIALS AND METHODS

The study was a cross sectional design. It recruited HIV/AIDS men patients hospitalized at Dr. Soetomo Hospital Surabaya who presented with chronic diarrhea in order to confirmed Cryptosporidium infection between May 2007 and June 2008. Participants self completed a questionnaire that recorded sexual behaviour. Testing for Cryptosporidium used modified version acid fast stain of Ziehl Neelsen (WHO 2003).

RESULTS

There were 93 HIV/AIDS patients consist of 5 homosexual men and 88 non homosexual men were recruited between Mei 2007 and June 2008. Three among five homosexual men (60%) and 39 among 88 among non homosexual men (42%) were Cryptosporidium positive.

DISCUSSION

The study result found that the prevalence of intestinal cryptosporidiosis among HIV/AIDS patients who have homosexual behaviour was 60%, and the prevalence of intestinal cryptosporidiosis among HIV/AIDS patients who have no homosexual behaviour was 42% . Odd ratio of homosexual behaviour for intestinal cryptosporidiosis among HIV/AIDS patients was 1,88. HIV/AIDS patients who have homosexual behaviour were nearly twice more likely to have had intestinal cryptosporidiosis. It suggest that homosexual behaviour is significant risk factor for intestinal cryptosporidiosis in HIV/AIDS patients and homosexual behaviour increased the risk factors of intestinal cryptosporidiosis.

These results are important because HIV/AIDS patients who have homosexual behaviour may not perceive themselves to be at risk of intestinal cryptosporidiosis from sexual behaviour. In general community, there was lack of concern about the risk of sexual exposure to Cryptosporidium (Hellard et al 2003). Indonesia is an endemic area for intestinal parasites and there was lack of sanitation factor. For this reason, it is important in advicing people to understand the risk factor leading to intestinal cryptosporidiosis and educate especially HIV/AIDS patients who have homosexual behaviour about how to avoid contracting Cryptosporidium infection (Hellard et al 2003).

CONCLUSION

HIV/AIDS patients who have homosexual behaviour increase the risk of intestinal cryptosporidiosis significantly. The prevalence of intestinal crypto-sporidiosis among HIV/AIDS patients who have homosexual behaviour was 60 %, and prevalence of intestinal cryptosporidiosis among HIV/AIDS patients who have no homosexual behaviour was 42 %.

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