

## Effectiveness of Taurolock<sup>TM</sup> in preventing recurrent catheter-related bloodstream infections in patients on home parenteral nutrition

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Taurolock<sup>TM</sup>, which contains taurolidine (antimicrobial) and citrate (anticoagulant), is an antibiotic lock solution used to prevent catheter-related bloodstream infection (CRBSI). It is generally used for patients on dialysis but recently it has also been introduced in patients on home parenteral nutrition (HPN)<sup>(1)</sup>. Yet, there are not enough data on its effectiveness in treating recurrent CRBSI.

The present study has been conducted on six patients on HPN who had four or more episodes of CRBSI in the past and therefore started Taurolock<sup>TM</sup> to prevent recurrent CRBSI. A CRBSI was classified as definite (pyrexia with positive central culture) or probable (pyrexia with positive peripheral culture and an appropriate treatment response). The infection rate was calculated for each patient over the 24 months before the first Taurolock<sup>TM</sup> administration and for the time after initiating Taurolock<sup>TM</sup> until 31 March 2008. Any possible side effects attributable to the drug were also derived from the patient notes.

The average age of the patients was 43 (range 36–46) years, male:female 2:1. Four patients had inflammatory bowel disease, one had dysmotility and one had mesenteric vascular disease as aetiology requiring HPN. The mean duration of Taurolock<sup>TM</sup> usage was 252 d. Resulting infection rate per 100 catheter days before and after Taurolock<sup>TM</sup> are shown in the Table.

	Before Taurolock <sup>TM</sup>		After Taurolock <sup>TM</sup>		<i>P</i> -value
	Total no. of CRBSI	Infection rate/100 catheter days	Total no. of CRBSI	Infection rate/100 catheter days	
Total CRBSI	28	0.85	4	0.16	0.008
Definite CRBSI	21	0.62	4	0.16	0.032
Possible CRBSI	7	0.26	0	0.00	0.0002

Recorded adverse events included dysgeusia and perioral parasthesiae in two patients with Taurolock<sup>TM</sup> injection and palpitations in one patient, which correspond to the side effects recorded for high concentration of citrate.

In conclusion, Taurolock<sup>TM</sup> proved to be effective in reducing CRBSI significantly in patients with recurrent infections, with acceptable adverse event profile.

1. Jurewitsch B & Jeejeebhoy K (2005) *Clin Nutr* **24**, 462.