

Reducing the use of inappropriate abbreviations in prescriptions

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Introduction: Inappropriate use of abbreviations in prescriptions affects patient safety.

Objectives: We investigated the effect of the 'Do Not Use' list on the use of such inappropriate abbreviations and the adherence to the Hospital Authority's approved 'Standard Abbreviations in Prescribing' list.

Methods: We analysed the use of prescribing abbreviations in prescriptions before and after the introduction of the 'Do Not Use' list and the rate of related medication incidents in Queen Mary Hospital over this period.

Results: A total of 12 639 drug items were analysed. The use of abbreviations discouraged by the 'Do Not Use' list was 9% per number of drugs prescribed before its introduction in October 2008, which was reduced to 1% after the intervention. Commonly used abbreviations related to the 'Do Not Use' list were 'QD', 'mcg' and 'units', which were used at a rate of 5.5%, 1% and 2% at baseline and reduced to 0.5%, 0.3% and 0.4% respectively after its introduction. 8% of the drugs were abbreviated drug names of which 49% were not found in the 'Standard Abbreviations' list. Non-approved abbreviations were also used to indicate the 'route of administration' at a rate of 10%. During 2008–2010, one medication incident directly related to the 'Do Not Use' list and 16 incidents related to the use of other non-approved abbreviations (four incidents having a severity score of two or more and 13 incidents scoring one) were reported.

Conclusions: The introduction of the 'Do Not Use' list was very effective in reducing the use of inappropriate abbreviations. However, the use of non-approved abbreviations is common. Enlarging the 'Do Not Use' list is recommended.

Evidence of serologic activity in chronic hepatitis B after hepatitis B surface antigen seroclearance

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Background: Possible serologic activity after hepatitis B surface antigen (HBsAg) seroclearance in chronic hepatitis B (CHB) has not been thoroughly investigated.

Methods: We determined the levels of serum HBV DNA, hepatitis B core-related antigen (HBcrAg) and linearized HBsAg (CLEIA prototype) in CHB patients after HBsAg seroclearance. A total of 329 CHB patients (72.0% male) with documented HBsAg seroclearance were recruited.

Results: The median time interval from presentation to HBsAg seroclearance was 69.4 months. The median age of HBsAg seroclearance was 50 years. Serum HBV DNA, HBcrAg and linearized HBsAg were performed at a median time interval of 11.2 months after HBsAg loss. 85 (25.8%) and 69 (21%) of patients had detectable linearized HBsAg and HBcrAg, respectively. 133 patients (40.4%) had either one or both serologic markers detectable whereas serum HBV DNA was detectable in only seven (2.1%) patients. There was no correlation between linearized HBsAg and HBcrAg levels ($r=0.095$, $P=0.924$). There was no difference in the incidences of detectable linearized HBsAg and HBcrAg between patient samples taken at 6–12 and >12 months after HBsAg seroclearance ($P=0.146$ and 0.079 respectively). Among patients with detectable serology, an increased time interval after HBsAg seroclearance was not associated with any significant change in median levels of linearized HBsAg ($P=0.581$) and HBcrAg ($P=0.951$).

Conclusion: Using these novel linearized HBsAg and HBcrAg assays, viral serologic activities were demonstrated in more than 40% of CHB patients after HBsAg seroclearance. These tests may have potential applications in diagnosing and prognosticating CHB patients with HBsAg seroclearance.

Acknowledgements: The authors would like to thank Prof Y Tanaka and N Shinkai, Department of Virology and Liver Unit, Nagoya City University Graduate School of Medical Sciences, Japan, for the provision of linearized HBsAg and HBcrAg testing.