2001 National Survey of Hospital Coagulation Laboratory Practices: Test Ordering and Result Reporting

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Introduction: Coagulopathy and bleeding are major public health concerns, and coagulation laboratory tests are principal components of clinical management. To characterize, among other issues, coagulation laboratory test ordering and result reporting practices, we conducted a survey of laboratories in 2001.

Methods: From a sampling frame of institutions listed in the 1999 directory of the American Hospital Association, we randomly selected 800 hospital coagulation laboratories (sampling rate, 14%; response rate, 79%). A group of coagulation experts and survey methodologists assisted in survey design and further evaluated content and format of the survey before pilot testing.

Results: Ninety-seven percent of sampled hospitals performed coagulation testing.

Test requisition. Respondents reported using the following therapies on test requisition forms: coumadin (53%), unfractionated heparin (39%), heparinoid (33%), low molecular weight heparin (23%), and salicylate (16%).

Test result information. From 90% to 98% of respondents provided measurement units and 76–87% provided needed specimen comments for prothrombin time (PT), activated partial thromboplastin time (aPTT), von Willebrand factor (vWF) antigen, and protein C assays. From 93 to 97% of respondents supplied reference intervals for these assays. The following proportions of respondents provided therapeutic ranges: PT (54%), aPTT (38%), vWF antigen (5%), and protein C (5%). The proportions providing written interpretations were as follows: aPTT (4%), PT (6%), vWF antigen (21%), and protein C (22%).

Reporting of critical values. Ninety-nine percent of respondents reported critical values. Of these, the following practices were reported: critical values telephoned to clinician and call documented (99%), critical values repeated and documented as confirmed (91%), critical values telephoned to clinician and call not always documented (6%), and critical values indicated on report but no further action taken (5%).

Conclusion: We documented variability in certain test ordering and result reporting practices, some of which may affect patient outcome.