

JOURNAL-BASED LEARNING EXERCISES



Please select your choice of correct answers and complete the exercises online at: www.ibms.org/cpd/jbl

DEADLINE WEDNESDAY 7 AUGUST 2019

Early colposcopic reassurance and discharge to routine recall does not increase subsequent high-grade referral or treatment rates. Macdonald M, Lyon R, Smith J, Tidy J, Palmer J. <i>Cytopathology</i> 2017; 28 (5): 407–12. Assessment No: 050819		Laboratory assay measurement of modified clotting factor concentrates: a review of the literature and recommendations for practice. Young GA, Perry DA. <i>J Thromb Haemost</i> 2019; 17 (4): 567–73. doi: 10.1111/jth.14394. Assessment No 050419	
01	Referrals for moderate dyskaryosis or worse increased by 19% between 1 April 2014 and 31 March 2015.	01	Ellagic acid APTT reagents underestimate rFIX Fc as levels drop to 0.2 IU/mL and 0.05 IU/mL.
02	Each year since 1 April 2011 there has been a significant increase in the number of referrals with high-grade cytology to the Jessop Wing colposcopy unit.	02	Recombinant FIX products carry no risk of transmitting human immunodeficiency virus.
03	Treatment rates increased by 49% since 2011.	03	The authors of the paper concur with the manufacturer of the FVIII-SC molecule that one-stage clotting assays can safely be used to assay FVIII-SC as long as the result is multiplied by a factor of two.
04	The study data were gathered from pathology and colposcopy databases and cross-referenced with women referred with high-grade dyskaryosis and those who had undergone LLETZ treatment.	04	According to the authors, most coagulation laboratories will use only one APTT activator for all APTT-based assays.
05	Cytology specimens were processed using ThinPrep, and HPV tested using cobas 4800.	05	According to the authors, it is the variation in the types of silica and polyphenolic acid used in commercial APTT reagents that exert different effects on the results of factor assays for the FVIII and FIX concentrates that are the subject of the review.
06	1765 women underwent LLETZ treatment with a median referral age of 39.	06	Both currently available chromogenic FIX assays correctly measure rFIX Fc.
07	96% of women referred had an abnormal cervical screening sample.	07	The authors consider it is unlikely that each haemophilia treatment centre will be able to be fully self-sufficient in having the necessary assays available in the new era of clotting factor concentrates.
08	12% of women in the “see and treat” group had no CIN in their LLETZ specimen.	08	Haemophilic arthropathy results in only temporary joint damage.
09	There was a significantly higher likelihood of a negative LLETZ in the women previously discharged to routine recall as compared with those not previously seen in colposcopy.	09	Chromogenic FIX assays are not licenced in the USA.
10	In the women previously discharged to routine recall from colposcopy there were 48 cases of CIN 3.	10	Very significant over-estimation of FIX levels occurs when certain silica APTT reagents are used to assay N9-GP.
11	In 2014, 54% of referrals resulted in a “see and treat” procedure compared to only 39% in 2012.	11	The authors of the article indicate that the chromogenic assay can be recommended to measure recoveries of all five of the novel FVIII concentrates.
12	During the study period, 39 cases of invasive disease were found, none of which were in the previously seen discharged to routine recall cohort.	12	The source of phospholipid in APTT reagents has not been proven to impact factor assay results when used to measure the clotting factor concentrates listed in the review.
13	Colposcopy is highly sensitive in detecting high-grade CIN in low-grade cytology referral cases.	13	The chromogenic FIX assay uses excess FVIII such that the amount of FVIII in the patient’s plasma is irrelevant to the assay.
14	All high-grade abnormalities stain white on application of acetic acid.	14	Underestimation of FVIII/FIX levels can result in under-dosing of clotting factor concentrate and put patients at risk of bleeding.
15	It is suggested that biopsy may have missed an area of CIN for some of the previously seen women.	15	According to the study by Gu <i>et al.</i> (2014), correct results are obtained with SynthasIL and Actin FS APTT reagents when used to assay N8-GP.
16	Some studies suggest multiple random biopsies from each cervical quadrant or area of the aceto-white change should be taken to assess women referred with low-grade cytology HR- HPV positive.	16	The title of citation #6 in the reference list indicates it is a comparative field study evaluating the activity of recombinant FVII Fc fusion protein in plasma samples.
17	One study reviewed reported concordance in >50% of the punch biopsy specimens and subsequent excisional specimens.	17	One-stage clotting assays using Actin FSL and CK Prest APTT reagents overestimate levels of N9-GP.
18	Punch biopsy may act as a treatment for small high-grade lesions.	18	One-stage clotting assays using CK Prest and Cephascreen APTT reagents correctly estimate levels of rFVIII Fc and N8-GP, but underestimate levels of rFVIII-SC.
19	Pooled data from four large European trials suggest HR-HPV screening gave a 60–70% greater protection from the cervical cancer than cytology screening alone.	19	Not all silica APTT reagents have been tested for use in one-stage clotting assays to measure rFIX Fc and rFIX FP.
20	The increase seen in treatments during the study period is likely due to the increased sensitivity of HPV triage in detecting women with high-grade disease.	20	One-stage clotting assays using Trinclot HS and Actin FSL APTT reagents correctly estimate levels of rFIX Fc.
REFLECTIVE LEARNING			
01	The study data showed a significant increase in both the number of women referred with high-grade dyskaryosis and those undergoing treatment. Compare these findings to those seen in your own laboratory and colposcopy unit(s) for the same time period and discuss similarities and differences.	01	Discuss the implications of limited factor assay repertoires in coagulation laboratories with respect to haemophilia treatment and monitoring.
02	Given that there was a significantly higher likelihood of a negative LLETZ in women previously discharged to routine recall as compared to those not previously seen in colposcopy, could this suggest that this cohort of women is potentially being over-treated? If so, what could be the consequences?	02	Check the title of reference number 6 on the internet and discuss whether transcription errors in publications like this should be a concern.