Valley Medical Laboratories

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Letter to Physicians

January 16, 2023

Re: Semen Analysis at Valley Medical Laboratories

Despite the World Health Organization's (WHO) efforts to standardize conventional manual semen analysis, the labor-intensive technique still lacks accuracy and reproducibility. As part of our commitment to quality, the staff at Valley Medical Laboratories (VML) enthusiastically announce the roll-out of our new automated semen analysis analyzer (SQA system from Medical Electronic Systems) effective January 16, 2023.

SQA systems are the most widely used clinical diagnostic semen analyzers in North America and have been a world leader for 20 years. This new automation will allow us to streamline our semen analysis program, standardize testing, and finally adopt the WHO 5th Edition testing criteria. With automated testing we will see increased accuracy and precision, and free-up lab staff to perform other tasks, a welcome bonus in an era of unprecedented human resource challenges.

Collection procedures and test ordering for semen analysis will remain the same. Please note:

- Samples must not be refrigerated. Keep at room temperature or body temperature and deliver to the lab within 45 minutes of collection.
- All samples must continue to be delivered to VML at 105-537 Leon Avenue in Kelowna, Monday to Friday before 2:00 pm.

NEW WHO5 Semen Analysis Reference Intervals

Current Method			New Method as per World Health Organization Laboratory Manual for Semen Analysis 5 th Edition		
Test	Interval	Units	Test	Interval	Units
рН	7.0-8.5	N/A	pН	≥7.2	N/A
Volume	≥1.5	mL	Volume	≥1.5	mL
Count	≥20	Billion/L	Concentration	≥15	Million/mL (M/mL)
Morphology	≤40	% abnormal	Morphology	≥4	% normal
Motility	≥60	% motile	Total Motility	≥40	% motile
Forward Mobility	≥2+	Plus Scale	Progressive Motility	≥32	% motile
			Total Sperm	≥39	Million/ejaculate (M/ejaculate)
			WBC	<1	Millions/mL (M/mL)

