Normal range of bleeding time in west of Iran

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Letter to Editor

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Introduction

I read with great interest the contribution of Maleki et al. entitled "Normal range of bleeding time in urban and rural areas of Borujerd, west of Iran" that has been published in recent issue of ARYA Atherosclerosis.[1]

The bleeding time test (BTT) is an old in-vivo test for evaluation of platelets function and vascular integrity with low producibility.[2] Its procedure and performance is simple and due to its high dependence on operator skills, every laboratory should determine its reference range by itself and by one operator.[3] So, if you determine a reference range by a laboratory (an operator) it may not cover the same population tested by another laboratory (another operator) exactly.

The authors declared that participants were selected among patients referred to 9 rural and 16 urban medical centers. In an epidemiological study, to determine the reference range for a biologic parameter, it would be more logic and accurate to select participants among normal general population randomly to avoid any bias in results. The sampling methods in this regards have been fully addressed in biostatistics field.[4]

Besides, it is reported that all measurements of BTT were done by samplers in each medical center; as there were 25 medical centers for carrying out BTT, an important issue is how the authors are sure about standard incisions made by hand by various technicians while investigators did not use standard instrument for incision such as Template or Simplate.[5] As mentioned earlier, the results of BTT are highly dependent on operator's skill due to improperly performed puncture and can affect the results.

The difference of current reference range of BT in Borujerd that is different from worldwide reference range comprises that an important finding needs to be interpreted and addressed as this study has focused on reference range of BT in the region.

Owing to the authors cited "BT of the samples was determined according to Ivy simplate method considering national standard protocol in the selected persons" it would be cleared that according to Ivy protocol the BT is done directly on participants' forearms and there is no sample to be used in the procedure. In addition, there are four known different procedures that are in use for BTT; 1) The Duke method, 2) The Ivy method, 3) The Mielke method and 4) The simplate or surgicutt method. The former method is modified version of Ivy method and is done by a standard and sterile device (Figure 1) that makes a uniform incision. As the authors declared they have used a lancet for making an incision, naming Ivy simplate in the text is confusing.

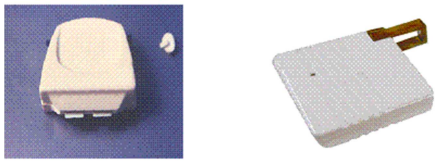

Figure 1. A schematic sample of incision devices are used in Ivy simplate or sugicutt method

Conflict of Interests

Authors have no conflict of interests.

References

1. Maleki A, Rashidi N, Almasi V, Montazeri M, Forughi S, Alyari F. Normal range of bleeding time in urban and rural areas of Borujerd, west of Iran.

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ARYA Atheroscler 2014; 10(4): 199-202.
2. Hankey GJ, Eikelboom JW. Aspirin resistance. Lancet 2006; 367(9510): 606-17.
3. Laffan MA, Manning RA. Investigation of haemostasis. In: Lewis SM, Bain BJ, Bates I, Editors. Dacie and lewis practical haematology. 9th ed. London, UK: Churchill Livingstone; 2001. p. 371-3.
4. Dillman DA, Eltinge JL, Groves RM, Little RJ. Survey nonresponse in design, data collection, and analysis. In: Groves RM, Editor. Survey nonresponse. New York, NY: Wiley; 2002. p. 3-26.
5. Kumar R, Ansell JE, Canoso RT, Deykin D. Clinical trial of a new bleeding-time device. Am J Clin Pathol 1978; 70(4): 642-5.

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