Watson's water hammer pulse

Sir,

We read with great interest the excellent comprehensive review titled “Watson's water hammer pulse” published in your journal.[1] We would like to draw attention to some additional clinically relevant information regarding this physical sign.

Babu et al., have noted that the sensitivity of water hammer pulse in the diagnosis of aortic regurgitation (AR) varies from 38-95% depending upon the severity of AR.[2] The overall specificity is only 16% for all degrees of AR. They also report that the clinical sign carries a negative predictive value of 73% for any degree of AR and 95% for severe AR.[3] This indicates that the absence of water hammer pulse makes the diagnosis of AR less likely. The low specificity found in this study indicates that this sign may be seen in conditions other than AR and that it is probably most useful when seen in conjunction with other findings of AR on physical examination.

The water hammer pulse is believed to result from a wide pulse pressure. However, Warnes et al., using intra-arterial radial artery measurements in five patients with severe AR demonstrated that the widened pulse pressure narrows with arm elevation. This fall in pulse pressure was associated with an increased palpated pulse. They attributed these changes to increased arterial compliance.[4] The pulse pressure is not wide to begin with in patients with acute AR. Therefore, a further fall in pulse pressure with limb elevation may not be as easily clinically appreciable as in patients with chronic AR. This can mask the water hammer pulse in patients with acute AR.

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References

Morphology of the temporo-mandibular joint at different ages

Sir,

I read with much interest the article titled 'A comparative study of the skeletal morphology of the temporo-mandibular joint of children and adults'.[1] The article described the differences of the temporo-mandibular joint (TMJ) skeletal morphology in children and adults. I appreciate the methods employed by the authors to study the TMJ.

The type of dentition (primary, secondary or mixed) has an important impact on the morphology of the TMJ in children and this factor also correlates with the signs and symptoms of the TMJ in them.[2] Meng et al.,[1] have observed that TMJ parameters of child cadavers differed significantly from those in adult volunteers. It is well known that morphological changes and degenerative changes become more pronounced with advancing age.[3] As the adult volunteers in the study were in their second decade, it is surprising how a difference of just one decade could lead to such significant differences.

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References

Heparin recall and India

Sir,

The write-up “Story of heparin recall: what can India do?” was timely. While unhealthy pigs have been blamed for the mishap it is not clear if the over-sulfated chondroitin sulfate was intentionally introduced. The product has been recalled even
in countries where no adverse effects were noted.[1]

There are important lessons for India. The problem can arise in any product and therefore our vigilance should extend beyond heparin. Unfortunately, we in India lack a system wherein such adverse effects can be detected. For all that went wrong, at least the pharmaceutical company acted swiftly when an increased adverse event rate was found. Is this true for Indian companies and are our laws strong enough to ensure such a swift response?

The lessons from the heparin recall go beyond the current incident and the molecule in question. It is vital that the clinicians are vigilant to detect unexpected events or unexpected frequency of expected events resulting from any drug they prescribe. Also a system should be in place for the clinicians to report such events to a central regulator. Another issue is about products being exported from India. Are they being regulated? Any problems with such products can bring infamy to the system as a whole. It will be pertinent to remember the recent report in the Journal of American Medical Association which indicted Ayurvedic medicines purchased from India via Internet as containing toxic metals including lead, mercury and arsenic in unacceptable amounts.[2] One is not sure about the contents of varied products being sold under the tag of ‘herbal medicines’ across the country. The wise learn from others’ mistakes. It is time we learn from this heparin incident and ensure that India does not face a similar situation in the days to come.

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