Re: Gul A, Gul M. Intracutaneous sterile water injection for pain relief during extracorporeal shock wave lithotripsy: comparison with diclofenac sodium. Urolithiasis. 2020 Apr;48(2):103–108. doi:10.1007/s00240-019-01147-9. Epub 2019 Jul 5

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In the article entitled above which was published by Gul A and Gul M, the authors have reported that they applied an injection method which could relieve the pain status during SWL treatment seance. The following points are presented to the attention of authors in context of the mentioned application method:

1. In distilled water injection method, the superficial pain feeling which is produced by application of an irritating intracutaneous agent masks the current visceral deep colic pain via the monosynaptic spinal reflex arc, which also resembles the competitive inhibition mechanism. This is called “gate control theory/Melzack”. According to another theory, sensory neurons temporarily interfere with the pain carrier axonal fibril signaling pathway to the brain [1]. In another saying, this may be regarded as “one nail drives out another”. However, the authors have mentioned that the application was achieved prior to one quadrant SWL without a pain condition, which in turn decrease the general quality of SWL and lead to patient concerning.
2. It is obvious that local and deep intermittent lidocain injection has been applied and distilled water has not been injected just as in our study in the article which was referred for injection method procedure utilized by Gul et al. [2].
3. Clinical application: The intracutaneous distilled water injection method was firstly introduced and defined in year 2005 by our research group in European Association of Urology Congress, and this method has been extensively used in our clinics for nearly 15 years. In

our opinion, if the renal colic condition is accurately diagnosed and the distilled water injection is applied according to the procedure, the efficacy and positive outcome rate is high in terms of treatment. Also in 2017, we have published a paper on technical details of this injection approach, in which injection was made to four distinct quadrants. Martensson et al. have reported that they have applied a four points injection treatment for labour pain relief [3]. Whereas, the injection was made to only one point in paper by Gul et al.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflicts of interest.

References

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