

Stone-free rate (SFR): a new proposal for defining levels of SFR

Bhaskar K. Somani · Mahesh Desai ·
Olivier Traxer · Sven Lahme

Received: 14 November 2013 / Accepted: 25 November 2013
© Springer-Verlag Berlin Heidelberg 2013

Abstract There is a lack of consensus in the definition of stone-free rate (SFR) after ureteric or renal stone surgery. We propose a simple classification to define levels of SFR post-treatment.

Keywords Urolithiasis · Stones · Follow-up · Stone-free rate (SFR)

There is a lack of consensus in the definition of stone-free rate (SFR) after ureteric or renal stone surgery. We propose a simple classification to define levels of SFR post-treatment.

Based on the follow-up modality, the suffix U (USS), C (CT) or X (X-ray) should be included with the SFR level (Table 1). This simple proposal will not only clarify the

Table 1 Definition of stone-free rate (SFR) level

| Stone-free rate (SFR) level | Size of stone detected | Evaluation modality | SFR |
|-----------------------------|------------------------|---------------------|--------------|
| 0 | No stones | USS, CT, XR | 0U, 0C or 0X |
| 1 | ≤1 mm | | 1U, 1C or 1X |
| 2 | ≤2 mm | | 2U, 2C or 2X |
| 3 | ≤3 mm | | 3U, 3C or 3X |
| 4 | ≤4 mm | | 4U, 4C or 4X |

size of the stone post-treatment, but also the follow-up modality used to determine it.

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

B. K. Somani (✉)
Department of Urology, University Hospital of Southampton
NHS Foundation Trust, Southampton SO16 6YD, UK
e-mail: bhaskarsomani@yahoo.com

M. Desai
Muljibhai Patel Urological Hospital, Dr. Virendra Desai Road,
Nadiad 387001, Gujarat, India
e-mail: mrdesai@mpuh.org

O. Traxer
Tenon University Hospital, 4 rue de la chine,
75020 Paris, France
e-mail: Olivier.traxer@tnm.aphp.fr

S. Lahme
Department of Urology, Center of minimally-invasive Therapy,
Robotic-assisted Surgery, Siloah St. Trudpert Klinikum,
Wilferdinger Strasse 67, 75179 Pforzheim, Germany
e-mail: sven.lahme@trudpert.de