STANDARD TREATMENT WORKFLOW (STW)

Scrotal Swelling

Amlesh Seth[1], Anup Kumar[2], Rakesh Kapoor[3], Dorairajan Narayanan[4], Santosh Kumar[5], Divakar Dalela[6], Anil Mandhani[7], Shivam Priyadarshi[8], Ravi Mohan Mavuduru[9], TP Rajeev[10]

[1]All India Institute of Medical Science, New Delhi; [2]Safdarjung, New Delhi; [3]Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow; [4]Jawaharlal Institute of Postgraduate Medical Education and Research, Pondycherry; [5]Christian Medical College Vellore; [6]Ex King George's Medical College, Lucknow; [7]Medanta, Gurugram; [8]Sawai Man Singh Medical College Jaipur; [9]Post Graduate Institute of Medical Education and Research Chandigarh; [10]Guhawati Medical College, Guhawati

CORRESPONDING AUTHOR

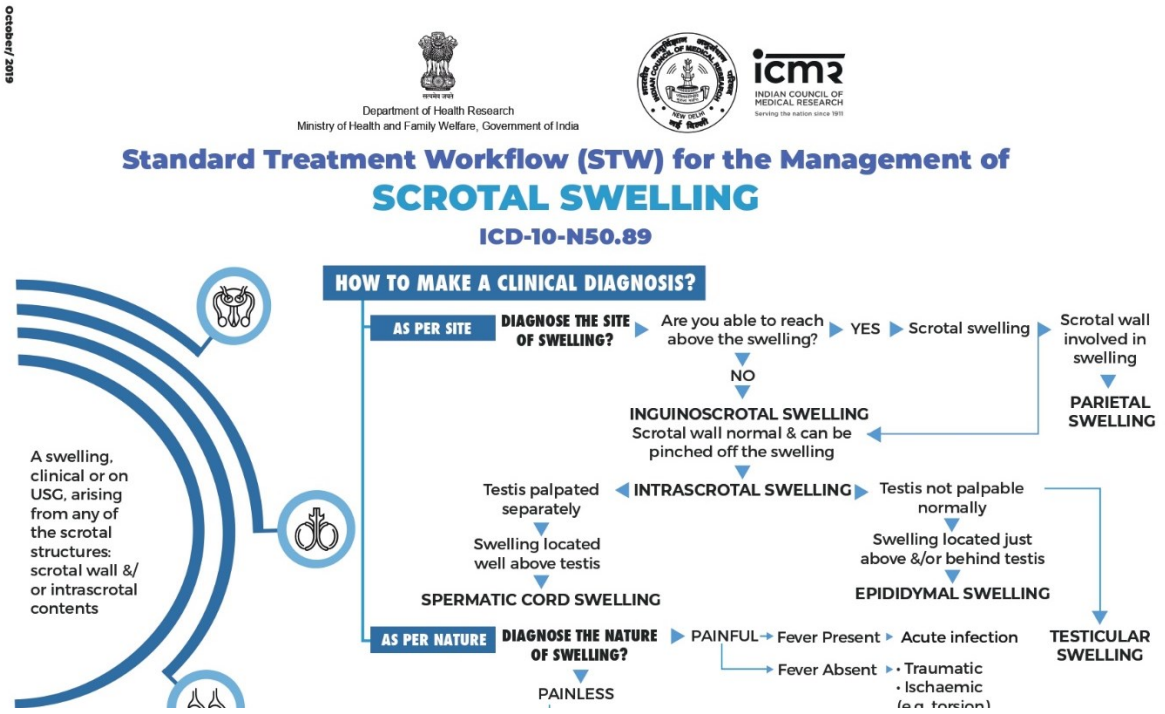
Dr. Amlesh Seth, Department of Urology, All India Institute of Medical Science, New Delhi
Email: amlesh.seth@gmail.com

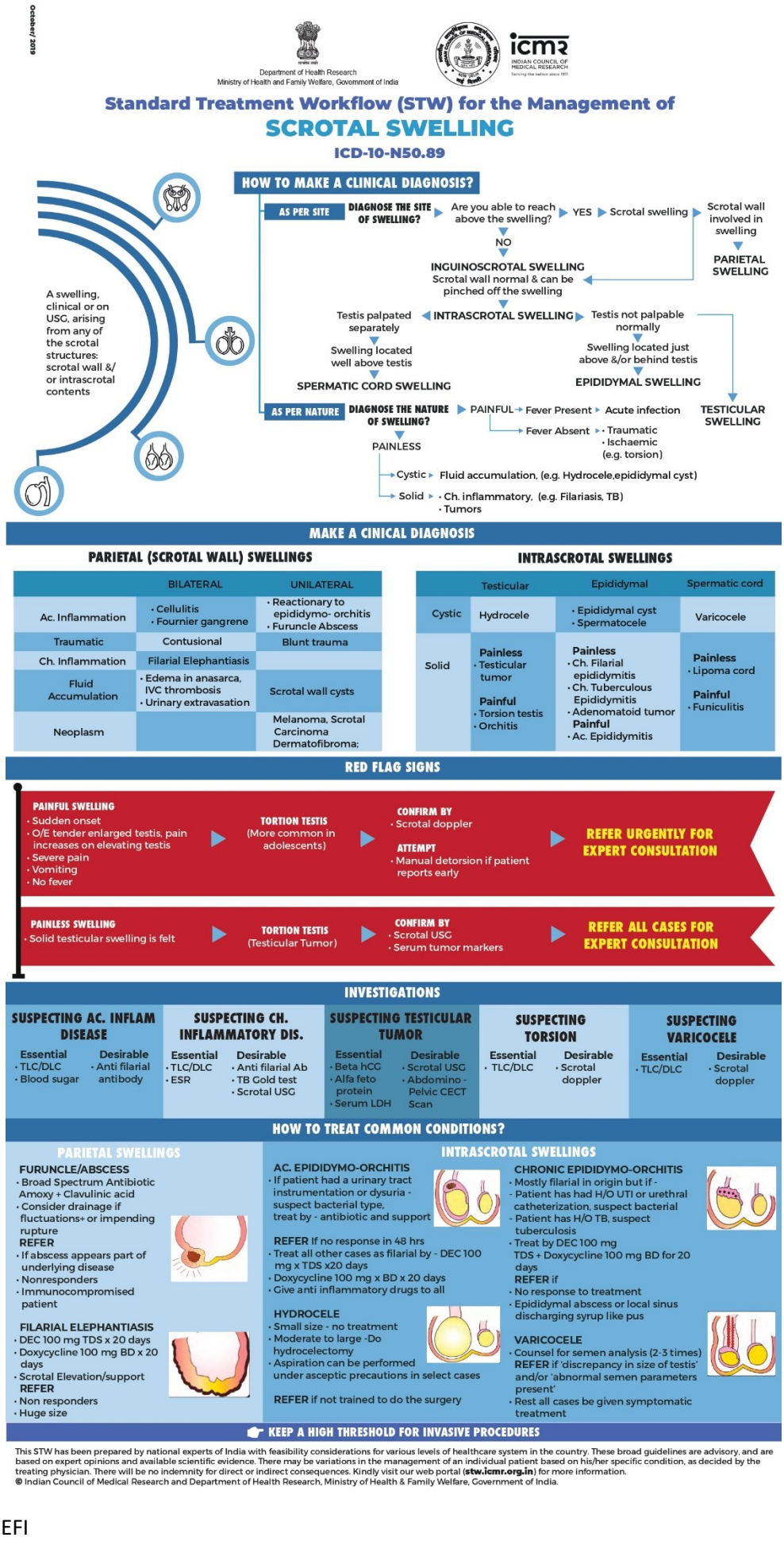
CITATION

Seth A, Kumar A, Kapoor R, Narayanan D, Kumar S, Dalela D, Mandhani A, Priyadarshi S, Mavuduru RM, Rajeev TP. Scrotal Swelling. Journal of the Epidemiology Foundation of India. 2024;2(1Suppl):S59-S60. DOI: https://doi.org/10.56450/JEFI.2024.v2i1Suppl.030

DISCLAIMER

This article/STW, was originally published by Indian Council of Medical Research (ICMR) under Standard Treatment Workflow. The reprinting of this article in Journal of the Epidemiology Foundation of India (JEFI) is done with the permission of ICMR. The content of this article is presented as it was published, with no modifications or alterations. The views and opinions expressed in the article are those of the authors and do not necessarily reflect the official policy or position of JEFI or its editorial board. This initiative of JEFI to reprint STW is to disseminate these workflows among Health Care Professionals for wider adoption and guiding path for Patient Care.




october/ 2019
Department of Health Research
Ministry of Health and Family Welfare, Government of India
icmr
INDIAN COUNCIL OF MEDICAL RESEARCH
Standard Treatment Workflow (STW) for the Management of
SCROTAL SWELLING
ICD-10-N50.89
A swelling, clinical or on USG, arising from any of the scrotal structures: scrotal wall &/ or intrascrotal contents
HOW TO MAKE A CLINICAL DIAGNOSIS?
AS PER SITE
DIAGNOSE THE SITE OF SWELLING?
Are you able to reach above the swelling?
YES
Scrotal swelling
Scrotal wall involved in swelling
PARIETAL SWELLING
NO
INGUINOSCROTAL SWELLING
Scrotal wall normal & can be pinched off the swelling
INTRASCROTAL SWELLING
Testis palpated separately
Swelling located well above testis
SPERMATIC CORD SWELLING
Testis not palpable normally
Swelling located just above &/or behind testis
EPIDIDYMAL SWELLING
TESTICULAR SWELLING
AS PER NATURE
DIAGNOSE THE NATURE OF SWELLING?
PAINFUL
Fever Present
Acute infection
Fever Absent
Traumatic
Ischaemic (e.g. torsion)
PAINLESS
Cystic
Fluid accumulation, (e.g. Hydrocele,epididymal cyst)
Solid
Ch. inflammatory, (e.g. Filariasis, TB)
Tumors
MAKE A CLINICAL DIAGNOSIS
PARIETAL (SCROTAL WALL) SWELLINGS
BILATERAL
UNILATERAL
Ac. Inflammation
Cellulitis
Fournier gangrene
Reactionary to epididymo- orchitis
Furuncle Abscess
Traumatic
Contusional
Blunt trauma
Ch. Inflammation
Filarial Elephantiasis
Fluid Accumulation
Edema in anasarca, IVC thrombosis
Urinary extravasation
Scrotal wall cysts
Neoplasm
Melanoma, Scrotal Carcinoma Dermatofibroma;
INTRASCROTAL SWELLINGS
Testicular
Epididymal
Spermatic cord
Cystic
Hydrocele
Epididymal cyst
Spermatocele
Varicocele
Solid
Painless
Testicular tumor
Painful
Torsion testis
Orchitis
Painless
Ch. Filarial epididymitis
Ch. Tuberculous Epididymitis
Adenomatoid tumor
Painful
Ac. Epididymitis
Painless
Lipoma cord
Painful
Funiculitis
RED FLAG SIGNS
PAINFUL SWELLING
Sudden onset
O/E tender enlarged testis, pain increases on elevating testis
Severe pain
Vomiting
No fever
TORTION TESTIS
(More common in adolescents)
CONFIRM BY
Scrotal doppler
ATTEMPT
Manual detorsion if patient reports early
REFER URGENTLY FOR EXPERT CONSULTATION
PAINLESS SWELLING
Solid testicular swelling is felt
TORTION TESTIS
(Testicular Tumor)
CONFIRM BY
Scrotal USG
Serum tumor markers
REFER ALL CASES FOR EXPERT CONSULTATION
INVESTIGATIONS
SUSPECTING AC. INFLAM DISEASE
Essential
TLC/DLC
Blood sugar
Desirable
Anti filarial antibody
SUSPECTING CH. INFLAMMATORY DIS.
Essential
TLC/DLC
ESR
Desirable
Anti filarial Ab
TB Gold test
Scrotal USG
SUSPECTING TESTICULAR TUMOR
Essential
Beta hCG
Alfa feto protein
Serum LDH
Desirable
Scrotal USG
Abdomino - Pelvic CECT Scan
SUSPECTING TORSION
Essential
TLC/DLC
Desirable
Scrotal doppler
SUSPECTING VARICOCELE
Essential
TLC/DLC
Desirable
Scrotal doppler
HOW TO TREAT COMMON CONDITIONS?
PARIETAL SWELLINGS
FURUNCLE/ABSCESS
Broad Spectrum Antibiotic Amoxy + Clavulinic acid
Consider drainage if fluctuations+ or impending rupture
REFER
If abscess appears part of underlying disease
Nonresponders
Immunocompromised patient
FILARIAL ELEPHANTIASIS
DEC 100 mg TDS x 20 days
Doxycycline 100 mg BD x 20 days
Scrotal Elevation/support
REFER
Non responders
Huge size
INTRASCROTAL SWELLINGS
AC. EPIDIDYMO-ORCHITIS
If patient had a urinary tract instrumentation or dysuria - suspect bacterial type, treat by - antibiotic and support
REFER If no response in 48 hrs
Treat all other cases as filarial by - DEC 100 mg x TDS x20 days
Doxycycline 100 mg x BD x 20 days
Give anti inflammatory drugs to all
HYDROCELE
Small size - no treatment
Moderate to large -Do hydrocelectomy
Aspiration can be performed under asceptic precautions in select cases
REFER if not trained to do the surgery
CHRONIC EPIDIDYMO-ORCHITIS
Mostly filarial in origin but if -
- Patient has had H/O UTI or urethral catheterization, suspect bacterial
- Patient has H/O TB, suspect tuberculosis
Treat by DEC 100 mg TDS + Doxycycline 100 mg BD for 20 days
REFER if
No response to treatment
Epididymal abscess or local sinus discharging syrup like pus
VARICOCELE
Counsel for semen analysis (2-3 times)
REFER if 'discrepancy in size of testis' and/or 'abnormal semen parameters present'
Rest all cases be given symptomatic treatment
KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES
This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit our web portal (stw.icmr.org.in) for more information.
© Indian Council of Medical Research and Department of Health Research, Ministry of Health & Family Welfare, Government of India.