

Ejaculatory Duct Obstruction (EDO)

Causes, Symptoms, Diagnosis, Low-Volume Semen, Azoospermia, TURED, Sperm Retrieval, ICSI and an Integrative Unani Approach

By Dr. Nizamuddin Qasmi

Founder & Chief Physician, Saira Health Care

Focused Practice in Sexual Disorders & Infertility

BUMS – Hamdard University, Delhi

MD, CGO

Certificate in Infertility – MGBIMS, Delhi

Certificate in Urology – London, UK

Masters in Male Infertility – MasterHealthPro (HealthPro)

Integrated Sexual and Reproductive Health – ISRH, UNFPA

Medical and reproductive-health literature reviewed and updated through September 2026.

Introduction

When a man tells me:

“Doctor, very little semen comes out, my sperm count is extremely low, and sometimes ejaculation is painful,”

I do not automatically assume that his testes are failing to produce sperm.

Sometimes the problem is farther downstream.

The testes may be producing sperm, the epididymides may be storing them, and the vas deferens may be carrying them normally—but sperm and seminal-vesicle fluid cannot pass through the final ducts into the urethra because the **ejaculatory ducts are obstructed**.

This condition is known as **Ejaculatory Duct Obstruction**, commonly abbreviated **EDO**.

Ejaculatory duct obstruction is uncommon, accounting for approximately **1–5% of male infertility cases**, but it deserves particular attention because it is one of the relatively few anatomical causes of severe male infertility that may sometimes be corrected surgically.

A complete bilateral obstruction can produce a characteristic picture:

very low semen volume + acidic semen + azoospermia + relatively normal testicular function.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

A partial obstruction can be more difficult to recognize. The man may still have sperm in his semen but develop severe oligozoospermia, poor motility, reduced ejaculate volume, painful ejaculation or blood in the semen.

The most important message I give patients is:

Ejaculatory duct obstruction is not the same as failure of sperm production.

This difference can completely change the treatment plan.

What Are the Ejaculatory Ducts?

To understand the condition, it helps to understand how semen normally reaches the outside of the body.

Sperm are produced inside the **testes**.

They then move through the:

seminiferous tubules → rete testis → efferent ducts → epididymis → vas deferens.

Near the prostate, each vas deferens joins the duct of a seminal vesicle.

Together, they form an **ejaculatory duct**.

The two ejaculatory ducts then travel through the prostate and open into the prostatic urethra.

During ejaculation, sperm from the reproductive tract combine with secretions from the seminal vesicles and prostate to form semen.

The seminal vesicles provide a very large proportion of semen volume and produce an alkaline, fructose-containing fluid. Current AUA/ASRM guidance estimates that roughly 70% of semen fluid comes from the seminal vesicles, with smaller contributions from the prostate and testis/epididymal system.

Therefore, when both ejaculatory ducts are completely obstructed, not only sperm but also much of the seminal-vesicle fluid may fail to enter the ejaculate.

That is why complete EDO can cause **both azoospermia and very low semen volume**.

What Is Ejaculatory Duct Obstruction?

Ejaculatory duct obstruction means that one or both ejaculatory ducts are partially or completely blocked so that semen cannot travel normally from the vas deferens and seminal vesicles into the urethra.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

EDO can be:

**complete or partial,
bilateral or unilateral, and
congenital or acquired.**

These distinctions matter because symptoms and fertility effects vary substantially.

A bilateral complete obstruction may produce azoospermia.

A partial obstruction may allow some sperm through but reduce their number and motility.

A unilateral obstruction may be even more subtle because the opposite duct can continue contributing to the ejaculate.

Complete Ejaculatory Duct Obstruction

The classic form is **complete bilateral EDO**.

The patient often has:

- Very low semen volume
- Azoospermia
- Acidic semen
- Sometimes absent or low seminal fructose
- Normal-sized testes
- Normal or near-normal reproductive hormones
- Palpable vas deferens

Current AUA/ASRM guidance advises considering EDO particularly when semen is **azoospermic, acidic and below 1.4 mL in volume**, testosterone is normal and both vasa deferentia are palpable. In that situation, transrectal ultrasound or pelvic MRI may be appropriate.

The EAU similarly recommends TRUS in patients with low semen volume, acidic pH and azoospermia or severe oligozoospermia when congenital absence of the vas deferens has been excluded.

Partial Ejaculatory Duct Obstruction

Partial EDO is more challenging.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Some seminal fluid and some sperm still pass through.

The semen volume may therefore be normal or only mildly reduced.

The patient may show:

- Severe oligozoospermia
- Poor sperm motility
- Variable morphology
- Painful ejaculation
- Hematospermia
- Pelvic or perineal discomfort
- Infertility despite some sperm being present

A systematic review and clinical evidence summary describes partial EDO as capable of producing oligo-astheno-teratozoospermia even when semen volume and fructose are not obviously abnormal.

For this reason, partial EDO should not be diagnosed simply because a man's sperm count is low.

Many other causes of severe male-factor infertility are far more common.

How Common Is Ejaculatory Duct Obstruction?

EDO is considered **uncommon**.

Published reviews estimate that it accounts for approximately **1–5% of male infertility cases**.

That is important clinically.

Because EDO is uncommon, a doctor should neither miss it nor overdiagnose it.

Not every man with low semen volume has EDO.

Not every man with azoospermia has EDO.

And not every cyst seen near the prostate on ultrasound is actually responsible for infertility.

A correct diagnosis requires the semen pattern, history, examination and imaging findings to make sense together.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Why Ejaculatory Duct Obstruction Is Important

EDO is important for three reasons.

First, **sperm production may be preserved.**

Second, some forms are anatomically treatable.

Third, even when the obstruction cannot or should not be corrected, sperm can often be retrieved from the epididymis or testis and used for ICSI.

Current AUA/ASRM guidance states that in infertile men with EDO, clinicians may consider **TURED and/or surgical sperm extraction.**

The current EAU guideline similarly recognizes both surgical treatment of the obstruction and sperm retrieval with assisted reproduction as valid pathways.

Causes of Ejaculatory Duct Obstruction

EDO can be congenital, acquired or occasionally functional.

A modern evidence review divides important causes into congenital abnormalities, inflammation or infection, trauma, calculi and functional disorders.

Congenital Causes

Congenital means present from development or birth.

Possible congenital causes include:

- Ejaculatory duct atresia
- Congenital duct stenosis
- Müllerian duct cysts
- Prostatic utricle cysts
- Wolffian duct abnormalities
- Seminal-vesicle cysts
- Developmental abnormalities of the vas/seminal-vesicle system
- Rare ectopic duct anatomy

Some of these abnormalities may remain unnoticed until the patient undergoes an infertility evaluation.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Müllerian and Midline Prostatic Cysts

A cyst located in the midline of the prostate can compress the ejaculatory ducts.

In some men this creates complete obstruction.

In others the obstruction is partial.

Current EAU guidance specifically identifies **Müllerian, prostatic and seminal-vesicle cysts** among causes of ejaculatory-duct obstruction and notes that cyst-associated obstruction may be treated with incision, unroofing or other appropriate endoscopic management.

Historically, cystic obstruction has tended to respond better to TURED than dense post-inflammatory scarring, although most evidence is observational.

Zinner Syndrome

A rare congenital condition known as **Zinner syndrome** consists classically of:

seminal-vesicle cyst + ipsilateral ejaculatory-duct obstruction + renal agenesis on the same side.

It results from an abnormality in Wolffian duct development.

It is uncommon but demonstrates an important developmental principle:

The kidney, vas deferens, seminal vesicle and ejaculatory duct have interconnected embryological development.

Therefore, some reproductive-tract abnormalities may coexist with renal abnormalities.

Infection and Inflammation

Previous inflammation can cause scarring around or within the ejaculatory ducts.

Potential contributors include:

- Prostatitis
- Seminal vesiculitis
- Epididymal/reproductive-tract infection
- Certain sexually transmitted infections
- Genitourinary tuberculosis in regions where it occurs



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Inflammation may heal with fibrosis.

Once dense scar tissue forms, simply giving antibiotics later does not necessarily reopen the duct.

Antibiotics treat an **active bacterial infection** when present.

They are not a universal treatment for established fibrotic obstruction.

This distinction is important because men with chronic pelvic symptoms may receive repeated antibiotics even when infection has not been demonstrated.

Genitourinary Tuberculosis

Tuberculosis can affect the male reproductive tract and produce scarring at multiple levels, including the epididymis, vas deferens, seminal vesicles and ejaculatory ducts.

Older clinical series reported tuberculosis as an important cause of complex obstruction in endemic settings.

In such cases, a man may not have one simple short blockage that can be corrected by TURED.

The obstruction can be extensive.

When active tuberculosis is suspected, appropriate infectious-disease/urological evaluation is required.

Ejaculatory Duct Stones and Calcification

Calculi or calcification around the ejaculatory ducts, prostate or seminal-vesicle system can occasionally contribute to obstruction.

TRUS may demonstrate calcifications or ductal changes.

The EAU lists calculi and related obstructing abnormalities among conditions that may be treated with approaches such as seminal vesiculoscopy, dilation or laser techniques in appropriately selected cases.

Trauma and Previous Surgery

Damage to the pelvic reproductive tract can occasionally produce acquired obstruction.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Previous pelvic procedures, trauma or instrumentation may alter normal duct anatomy or produce scarring.

A detailed surgical history is therefore important.

A patient may forget to mention an operation performed many years previously because he does not realize it could be connected with infertility.

Functional Ejaculatory Duct Obstruction

There is also a much less clearly defined condition sometimes called **functional EDO**.

Instead of a fixed physical blockage, abnormal neuromuscular function may interfere with emptying of the seminal vesicles or ducts.

Reported associations include neurological disease, spinal cord injury, diabetes-related neuropathy, pelvic nerve injury and certain medications.

Evidence for diagnosis and treatment of functional EDO is much weaker than for an obvious structural obstruction.

For this reason, invasive surgery should not be performed simply because a patient's symptoms appear suggestive.

Symptoms of Ejaculatory Duct Obstruction

Some patients have no symptoms apart from infertility.

Others may experience:

- Low semen volume
- Very weak ejaculatory volume
- Painful ejaculation
- Pelvic or perineal pain
- Blood in semen
- Reduced force of ejaculation
- Discomfort after ejaculation
- Chronic pelvic symptoms
- Difficulty achieving pregnancy



The major evidence review on EDO describes painful ejaculation, hematospermia and perineal pain among the recognized symptomatic presentations.

However, none of these symptoms alone proves EDO.

Painful Ejaculation

Pain during or immediately after ejaculation deserves proper assessment.

EDO is one possible explanation, but others include:

- Prostatitis
- Chronic pelvic pain syndrome
- Pelvic-floor dysfunction
- Seminal-vesicle inflammation
- Urethral disease
- Medication-related ejaculatory problems

AUA/ASRM guidance specifically notes that painful ejaculation may justify TRUS or pelvic MRI when obstruction is suspected because identifying and treating EDO can sometimes improve symptoms.

Blood in Semen – Hematospermia

Some men with EDO have hematospermia.

Blood in semen is often benign, particularly after isolated episodes in younger men, but recurrent or persistent hematospermia deserves evaluation.

EDO is only one possible cause.

Inflammation, infection, calculi, prostate or seminal-vesicle abnormalities and other conditions can also produce hematospermia.

Therefore, hematospermia plus infertility and low semen volume creates a stronger reason for reproductive-tract investigation than hematospermia alone.

Does EDO Cause Erectile Dysfunction?

Not normally.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

The pathways responsible for sperm transport and the mechanisms responsible for penile erection are different.

A man with complete EDO may have:

- Normal sexual desire
- Normal testosterone
- Strong erections
- Normal orgasmic sensation

yet still have azoospermia because sperm cannot enter the urethra.

This distinction is particularly important psychologically.

Infertility is not the same as impotence.

Can a Man With EDO Ejaculate Normally?

Yes.

Many men still have a visible ejaculation.

However, the volume may be reduced, particularly when both ejaculatory ducts are completely obstructed.

Remember that the seminal vesicles produce a large proportion of the ejaculate.

If their secretions cannot pass through the ejaculatory ducts, semen volume becomes markedly lower.

Why Is the Semen Often Acidic?

Seminal-vesicle fluid is alkaline.

Prostatic secretions are comparatively acidic.

When complete distal obstruction prevents seminal-vesicle fluid from entering the ejaculate, the remaining semen may therefore become unusually acidic.

Current AUA/ASRM guidance uses **pH below 7.0** together with azoospermia and semen volume below 1.4 mL as a strong clue to distal genital-tract obstruction.

However, pH alone does not diagnose the condition.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Why Can Fructose Be Low or Absent?

The seminal vesicles are an important source of fructose in semen.

If their fluid cannot reach the urethra because of complete EDO, seminal fructose can become very low or absent.

Historically, fructose testing was often emphasized.

Current AUA/ASRM guidance notes that fructose testing can be relatively unreliable and is not essential when the overall semen pattern already creates strong suspicion for obstruction.

Therefore, I do not believe diagnosis should depend on one fructose result.

Complete EDO Versus Partial EDO

The distinction is clinically useful.

Complete bilateral EDO

More likely to produce:

very low-volume azoospermia + acidic semen.

Partial EDO

May produce:

oligozoospermia + poor sperm motility ± reduced volume ± painful ejaculation.

A systematic review of TURED outcomes found that improvements generally appeared greater in patients with **partial obstruction and congenital/cystic causes** than in those with complete or acquired inflammatory disease.

This helps explain why treatment results vary.

Does Normal Semen Volume Exclude EDO?

It makes **complete bilateral EDO much less likely**, but does not absolutely exclude a partial or unilateral abnormality.

Current AUA guidance states that in men with normal ejaculation and normal semen volume, TRUS or pelvic MRI will **usually not identify a clinically meaningful ejaculatory-duct obstruction**, which is why routine imaging is not recommended in every infertile man.

This is an important protection against overdiagnosis.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Low Semen Volume Does Not Automatically Mean EDO

This is another very important point.

Low semen volume can occur because of:

- Incomplete semen collection
- Retrograde ejaculation
- Failure of emission
- Low testosterone
- Congenital absence of the vas deferens/seminal vesicles
- Ejaculatory-duct obstruction
- Certain neurological disorders
- Medication-related ejaculatory dysfunction

Therefore:

low-volume semen is a clue, not a diagnosis.

EDO Versus Retrograde Ejaculation

In retrograde ejaculation, semen travels backward into the bladder rather than exiting normally through the urethra.

In EDO, the ducts themselves prevent sperm and seminal fluid from entering the urethra normally.

A man with retrograde ejaculation may produce very little external semen but have sperm in urine collected after orgasm.

Therefore, post-ejaculatory urine testing can be important when the clinical pattern suggests retrograde ejaculation.

The treatments are completely different.

EDO Versus Anejaculation

Anejaculation means there is no normal forward ejaculatory emission.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

The problem may involve neurological signalling, medications, spinal injury or other mechanisms.

EDO is a structural or functional blockage of the distal sperm pathway.

A patient can describe both conditions as:

“Nothing comes out.”

But they are not the same disease.

Correct terminology matters because treatment depends on mechanism.

EDO Versus Congenital Bilateral Absence of the Vas Deferens

CBAVD can produce a semen pattern similar to distal obstruction:

- Azoospermia
- Very low semen volume
- Acidic semen

The difference is anatomical.

In CBAVD, one or both vas deferens are congenitally missing rather than the ejaculatory ducts simply being blocked.

Physical examination therefore plays an important role.

AUA guidance notes that pelvic imaging does not generally add useful information once CBAVD has been clinically identified, whereas CFTR genetic testing becomes particularly relevant.

EDO Versus Non-Obstructive Azoospermia

This distinction is crucial.

A man with **non-obstructive azoospermia (NOA)** has severe impairment of sperm production.

A man with complete **EDO** may produce sperm normally but cannot deliver them into the ejaculate.

Typical EDO clues include:

- Normal-sized testes
- Normal or near-normal FSH



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Normal testosterone
- Palpable vasa
- Very low semen volume
- Acidic semen

By contrast, markedly small testes and elevated FSH increase suspicion for primary spermatogenic failure.

AUA/ASRM notes that clinical and laboratory findings can usually distinguish obstructive from non-obstructive azoospermia without routine diagnostic testicular biopsy.

How Is Ejaculatory Duct Obstruction Diagnosed?

There is no single perfect diagnostic test.

The diagnosis is built from several pieces:

history + examination + repeated semen analysis + reproductive hormones + targeted imaging.

For selected difficult cases, additional specialist diagnostic procedures may be needed.

Step One: Detailed Clinical History

I want to know:

How long has the couple been trying for pregnancy?

Has the patient ever caused a pregnancy previously?

Is semen volume consistently low?

Is ejaculation painful?

Is blood ever present in the semen?

Does ejaculation feel weak or obstructed?

Has the patient had prostatitis or epididymitis?

Any sexually transmitted infection?

Any history of tuberculosis?



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Previous pelvic or prostate surgery?

Previous trauma?

Diabetes?

Neurological disease?

Relevant medication use?

These details can substantially change the probability of EDO.

Step Two: Physical Examination

The examination should assess:

- Testicular size and consistency
- Epididymides
- Both vas deferens
- Secondary sexual characteristics
- Possible signs of hormonal deficiency
- Other genital abnormalities

If the testes are normally developed and both vasa deferentia are palpable, distal obstruction becomes more plausible in an azoospermic man with low-volume acidic semen.

If the vas deferens is absent, the diagnostic pathway moves toward CBAVD and CFTR assessment.

Step Three: High-Quality Semen Analysis

Semen analysis is central to diagnosis.

The **WHO sixth-edition laboratory manual** remains the current international reference for standardized examination and processing of semen.

Important findings include:

- Semen volume
- Sperm presence or absence
- Sperm concentration



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Motility
- Semen pH
- Other relevant laboratory findings

For complete EDO, the classic pattern is low-volume azoospermia with acidic semen.

For partial EDO, sperm may still be present.

Why Azoospermia Must Be Confirmed Carefully

When no sperm are seen initially, the laboratory should use appropriate methods to ensure that **cryptozoospermia is not missed**.

WHO emphasizes standardized processing and additional assessment of very low sperm numbers.

A man with a few rare ejaculated sperm may have a different reproductive pathway from someone with true complete azoospermia.

I therefore consider correct semen-laboratory methodology essential before invasive procedures are planned.

Repeat Semen Analysis

One abnormal semen analysis is not always sufficient.

Semen volume can be falsely low after incomplete collection.

Rare sperm may be seen in one sample and absent in another.

For men with abnormal semen findings, repeat testing is commonly part of a proper male-infertility evaluation.

The aim is not simply to repeat the same number.

It is to determine whether the pattern is consistent.

Step Four: Hormonal Evaluation

FSH, LH and testosterone can help distinguish sperm-production failure from obstruction.

In pure EDO:

testosterone and FSH are usually relatively normal.

AUA/ASRM specifically identifies normal testosterone as part of the classic clinical picture prompting evaluation for EDO.

If testosterone is very low, low semen volume may arise partly from androgen deficiency, making the interpretation of pelvic imaging less straightforward.

Step Five: Transrectal Ultrasound – TRUS

Transrectal ultrasound is one of the most important imaging tests when EDO is genuinely suspected.

A small ultrasound probe is inserted into the rectum, allowing detailed visualization of:

- Prostate
- Seminal vesicles
- Ejaculatory ducts
- Midline cysts
- Calcification
- Duct dilation
- Other distal reproductive-tract abnormalities

Current EAU guidance recommends TRUS in men with low semen volume, acidic pH and azoospermia or severe oligozoospermia when EDO is suspected.

The Urological Society of India likewise recommends TRUS **only when EDO is suspected**, rather than routinely imaging every infertile man.

TRUS Findings Do Not Automatically Prove EDO

This is important.

A dilated seminal vesicle or midline cyst may support the diagnosis, but imaging findings should be interpreted together with semen and clinical findings.

TRUS is useful but not perfectly specific.

Some anatomical abnormalities are incidental.

A patient should not undergo surgery simply because a radiology report says:

“Seminal vesicles mildly prominent.”

The clinical pattern must support obstruction.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Pelvic MRI

Pelvic MRI can provide additional anatomical detail.

AUA/ASRM guidance notes that MRI may provide more accurate assessment of ejaculatory-duct dilation and midline prostatic cysts in selected patients.

MRI can be particularly helpful when:

- TRUS is inconclusive
- Anatomy is complex
- A cyst needs better characterization
- Another pelvic abnormality is suspected

It is not required routinely for every infertile man.

Vasography

Historically, **vasography** was considered a definitive way to demonstrate reproductive-tract obstruction.

Contrast material is introduced into the vas deferens and its passage is imaged.

However, vasography is invasive and can itself damage or scar the vas.

Modern practice has largely replaced routine diagnostic vasography with TRUS and MRI.

The Urological Society of India advises that vasography should not be performed purely as a diagnostic test and should generally be reserved for appropriate intraoperative situations.

Seminal-Vesicle Aspiration and Other Specialized Tests

In difficult cases, specialist centres may use procedures such as:

- Seminal-vesicle aspiration
- Seminal vesiculography
- Chromotubation
- Endoscopic seminal-vesicle examination



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

These techniques can sometimes help confirm that sperm are present upstream of the obstruction or clarify anatomy.

But they are not routine first-line investigations.

For most patients, good history, semen analysis and appropriate imaging provide the starting point.

Is Testicular Biopsy Required?

Usually not simply to diagnose EDO.

If the testicular size and hormone profile indicate preserved sperm production and the semen/imaging findings support distal obstruction, routine diagnostic testicular biopsy is generally unnecessary.

AUA/ASRM recommends against routinely performing testicular biopsy solely to differentiate obstructive from non-obstructive azoospermia.

If surgical sperm retrieval is required, testicular tissue or sperm can be obtained therapeutically rather than performing a separate biopsy first.

Treatment of Ejaculatory Duct Obstruction

Treatment depends on several questions:

Is the obstruction complete or partial?

Is it cystic, inflammatory, calcific or functional?

Does the patient have pain?

Is fertility the main objective?

Is the female partner's fertility normal?

Would restoring natural ejaculation provide a meaningful opportunity for pregnancy?

Or would sperm retrieval with IVF/ICSI provide a more appropriate pathway?

There is no one treatment suitable for every patient.

Transurethral Resection of the Ejaculatory Ducts – TURED

The traditional surgical treatment of EDO is:

Transurethral Resection of the Ejaculatory Ducts (TURED)



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

A small endoscopic instrument is passed through the urethra to the area of the prostate where the ejaculatory ducts open.

The obstructing tissue is carefully incised or resected to reopen the ducts.

No external skin incision is normally required.

Current EAU guidance recognizes TURED as an option for post-inflammatory and cystic ejaculatory-duct obstruction.

The AUA/ASRM guideline similarly states that TURED and/or sperm extraction may be considered in infertile men with EDO.

Can TURED Restore Sperm to the Semen?

Yes, in appropriately selected men.

But the success rate varies substantially.

A systematic review evaluating **29 studies and 634 men** found that after TURED:

- Semen volume improved in a median of approximately **83%**
- Sperm concentration improved in approximately **62.5%**
- Motility improved in approximately **63%**
- Median natural pregnancy rate was approximately **25%**

However, most studies were small and retrospective, so these numbers should be viewed as approximate rather than guaranteed probabilities.

Current EAU guidance similarly cites natural pregnancy rates around **20–25% after TURED** in published series.

Who Is More Likely to Benefit From TURED?

Evidence suggests better outcomes in:

- Partial obstruction
- Congenital/cystic obstruction
- Well-defined anatomical abnormalities

Results may be poorer when there is:

- Dense inflammatory scarring



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Multiple levels of obstruction
- Extensive reproductive-tract damage
- Significant coexisting sperm-production impairment

The systematic review found greater postoperative improvement in congenital and partial EDO than in some acquired or complete cases.

This is why patient selection matters.

TURED Does Not Guarantee Natural Pregnancy

A successful procedure can reopen the ducts and improve semen.

But pregnancy also depends on:

- Sperm quality
- Female age
- Ovarian reserve
- Ovulation
- Fallopian tubes
- Uterine health
- Duration of infertility
- Other reproductive factors

A man may have a technically successful operation yet the couple may still require ART.

Therefore, I believe the **female partner should be assessed before deciding how much time to invest in surgical restoration of natural sperm passage.**

Risks and Complications of TURED

TURED is a surgical procedure and is not risk-free.

Current EAU guidance describes possible complications including:

- Epididymitis
- Urinary infection
- Gross hematuria
- Hematospermia



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Urinary reflux into the ejaculatory ducts or seminal vesicles
- Rare worsening of obstruction or azoospermia in some partial cases

Patients should therefore understand both potential benefit and potential risk.

Why Can Surgery Occasionally Worsen the Problem?

Surgery itself produces healing.

Healing can produce scar tissue.

If delicate ducts are already only partially open, postoperative scarring can theoretically create renewed or even more severe obstruction.

This is one reason TURED should be used for a convincing diagnosis rather than performed empirically.

Transurethral Incision and Cyst Treatment

Not every patient requires a wide resection.

Selected cystic or short-segment abnormalities may be treated with:

- Incision
- Unroofing
- Endoscopic drainage
- Selected laser techniques

The exact procedure depends on the anatomy.

For a midline intraprostatic cyst, current EAU guidance notes that incision, unroofing or aspiration may be required rather than treating every case identically.

Seminal Vesiculoscopy

Transurethral seminal vesiculoscopy allows an endoscope to access the seminal-vesicle/ejaculatory-duct system.

It can be used in selected cases to identify or remove:

- Debris
- Stones



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Blood clots
- Certain obstructing abnormalities

EAU guidance lists seminal vesiculoscopy among alternative therapies for selected EDO cases.

Research continues to refine minimally invasive techniques, but TURED remains the better-established historical procedure.

Balloon Dilation and Laser Treatment

Some specialist centres have described:

- Balloon dilation
- Laser incision
- Endoscopic treatment of calcification

These may have a role in selected anatomical situations.

However, they do not yet have the depth of evidence required to state that they are superior to conventional treatment.

A patient's anatomy and the treating surgeon's expertise remain important.

What If Surgery Is Not Appropriate?

Some men do not require or should not undergo duct surgery.

Examples include:

- Complex extensive obstruction
- Functional rather than structural disease
- Poorly convincing diagnosis
- Significant female-factor infertility requiring IVF anyway
- Couples who prefer ART
- Failed previous surgical treatment

In these circumstances, sperm can often be retrieved directly for ICSI.

Sperm Retrieval in EDO



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Because the testes are generally producing sperm, retrieval in pure obstructive disease is usually much more straightforward than in non-obstructive azoospermia.

Possible techniques include:

PESA – Percutaneous Epididymal Sperm Aspiration

MESA – Microsurgical Epididymal Sperm Aspiration

TESA – Testicular Sperm Aspiration

TESE – Testicular Sperm Extraction

AUA/ASRM guidance states that in obstructive azoospermia, sperm may be retrieved from either the **epididymis or testis**.

MESA

Microsurgical epididymal sperm aspiration involves obtaining sperm directly from an epididymal tubule under magnification.

It can yield large numbers of sperm in many obstructive cases and allow cryopreservation for future ICSI cycles.

PESA

PESA uses a needle introduced through the scrotal skin into the epididymis.

It is less invasive.

The exact choice between PESA and MESA depends on anatomy, local expertise and the amount of sperm required.

TESA and TESE

If epididymal retrieval is unsuitable or unsuccessful, sperm can be obtained directly from the testis.

Because sperm production is usually preserved in EDO, a complex micro-TESE procedure is generally not required in a straightforward obstructive case.

Micro-TESE is more important in **non-obstructive azoospermia**, where sperm production itself is sparse and patchy.

ICSI for Ejaculatory Duct Obstruction



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

With **intracytoplasmic sperm injection**, one viable sperm is injected directly into a mature egg.

This allows sperm obtained from the epididymis or testis to be used despite complete obstruction of the natural transport pathway.

AUA/ASRM specifically recognizes surgical sperm retrieval combined with ART as an alternative to TURED in men with EDO.

ICSI therefore bypasses the blockage.

It does **not** reopen the ejaculatory ducts.

TURED or Sperm Retrieval With ICSI?

There is no universal answer.

I believe the decision should be made at the **couple level**.

TURED may be attractive when the obstruction is well defined, reconstruction is likely to succeed, the female partner has good fertility potential, and the couple values the possibility of natural conception.

Sperm retrieval with ICSI may be more practical when female age or ovarian reserve makes time important, IVF is already required for a female factor, anatomy is not suitable for correction, or the couple prefers assisted reproduction.

Current AUA/ASRM guidance specifically recognizes both TURED and surgical sperm extraction as legitimate options.

Why the Female Partner's Fertility Matters

This is often overlooked.

Suppose the male partner has EDO that could potentially be treated surgically.

If the female partner is young with normal ovarian reserve and no significant fertility disorder, waiting for semen improvement after surgery may be reasonable.

Now consider the same EDO in a couple where the female partner has markedly reduced ovarian reserve or another problem already requiring IVF.

In that situation, bypassing the obstruction with sperm retrieval and ICSI may be more efficient.

The ASRM/AUA guideline emphasizes **parallel assessment of both partners** when choosing male-infertility treatment.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Can Natural Pregnancy Occur After TURED?

Yes.

That is one of the principal advantages of restoring sperm to the ejaculate.

A systematic review reported a median natural pregnancy rate of approximately **25%**, while EAU guidance cites approximately **20–25%** in published TURED series.

However, those figures come largely from relatively small observational studies.

They should not be converted into a promise that one in four individual couples will conceive.

How Soon Should Semen Be Rechecked?

Follow-up protocols vary by surgeon and clinical setting.

Semen analysis is generally repeated after sufficient postoperative healing to determine whether volume, sperm concentration and motility have improved.

Some studies have assessed patients around six weeks to several months after treatment. Long-term follow-up can also be important because re-obstruction can occur.

The follow-up schedule should therefore be individualized.

Can EDO Recur?

Yes.

Postoperative scar formation or persistence of the original disease can cause recurrent obstruction.

Recurrence is one reason why ongoing semen monitoring matters after treatment.

If useful sperm appear after successful surgery but the couple has ongoing fertility concerns, sperm cryopreservation may sometimes be worth discussing.

Does Medicine Alone Treat EDO?

A fixed mechanical obstruction generally cannot be reliably reopened by oral medication.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

This is one of the most important points in the entire article.

If the duct is compressed by a cyst, blocked by dense scar tissue or congenitally atretic, a tablet cannot physically recreate the lumen.

However, medication can still be relevant when there is:

- Active infection
- Inflammation
- A contributing neurological problem
- A medication-induced functional ejaculatory disorder
- Another associated medical condition

The correct medical treatment therefore depends on what is causing the apparent obstruction.

Antibiotics and EDO

Antibiotics have a role when bacterial infection is actually present.

They should not be used repeatedly to “open the ejaculatory ducts” once dense fibrosis has formed.

This is particularly important in chronic pelvic complaints, where empirical antibiotic use can continue despite no evidence of infection.

Treatment should follow diagnosis.

Can Hormones Open Ejaculatory Ducts?

No.

Hormones can influence sperm production and semen-gland function, but they do not mechanically remove a fixed obstruction.

If testosterone deficiency is causing low seminal volume, treating the hormonal disease may improve semen production—but that is not the same as treating EDO.

Similarly, giving FSH or hCG to a man with normal sperm production but blocked ducts will not physically open those ducts.

Can Testosterone Help?

Testosterone is not a treatment for EDO.

Furthermore, in men trying to conceive, external testosterone can suppress FSH and LH and significantly reduce sperm production.

Current EAU and AUA/ASRM male-infertility guidance advises against exogenous testosterone as fertility therapy.

This is particularly important in a man with EDO whose sperm production may currently be preserved.

We do not want to take a patient who has a transport problem and create an additional sperm-production problem.

Ejaculatory Duct Obstruction and the Unani System of Medicine

As a physician trained in the **Unani System of Medicine**, I consider EDO a particularly useful example of why treatment should begin with understanding the **cause and structure of the disease**.

Unani medicine traditionally emphasizes individualized, cause-oriented treatment rather than treating every patient with the same medicine.

In a condition such as EDO, this principle can be applied very practically:

Is there infection?

Inflammation?

A cyst?

Dense fibrosis?

A stone?

Neurological dysfunction?

Or a true fixed anatomical obstruction?

Treatment should follow the answer.

Izala-i-Sabab – Addressing the Cause

A central Unani concept relevant here is **Izala-i-Sabab**, meaning attention to or correction of the causative factor.

Applied responsibly to EDO:

If active infection is present, the infection should be treated.

If a medication is causing a functional ejaculatory problem, the medication needs appropriate review.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

If metabolic disease or neuropathy is contributing, that condition should be managed.

If the patient has a cyst physically compressing both ejaculatory ducts, however, the anatomical problem requires appropriate urological assessment.

And if dense fibrosis has completely blocked the ducts, dietary or herbal treatment alone should not be presented as though it can reliably reopen scarred anatomy.

For me, that is a modern, scientifically responsible interpretation of cause-oriented Unani practice.

Ilaj-bil-Ghiza – Dietotherapy

Ilaj-bil-Ghiza, or dietary treatment, remains useful for general reproductive health.

An infertile man may simultaneously have:

- Obesity
- Diabetes
- Nutritional deficiencies
- Poor metabolic health
- Constipation
- Poor dietary habits

Correcting these factors can improve general health and may support reproductive well-being.

However:

A special food cannot physically remove an ejaculatory-duct cyst or reopen a completely scarred duct.

I therefore use diet as supportive treatment, not as a substitute for anatomical diagnosis.

Ilaj-bil-Tadbir – Regimental and Lifestyle Management

Lifestyle and regimental principles can support the patient through:

- Regular physical activity
- Healthy body weight
- Good sleep



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Stress management
- Avoidance of smoking
- Appropriate management of diabetes
- General sexual and reproductive health

These interventions can be particularly valuable when EDO coexists with broader metabolic or sexual-health issues.

Again, their role is supportive.

Ilaj-bil-Dawa – Unani Pharmacotherapy

Unani pharmacotherapy contains traditional approaches to reproductive and genitourinary complaints.

But scientific responsibility requires a clear statement:

High-quality clinical evidence demonstrating that a specific Unani formulation reliably opens a fixed ejaculatory duct obstruction is currently lacking.

This is especially important because EDO may be mechanically correctable.

A patient should not lose years of reproductive time taking medicines when imaging demonstrates a correctable anatomical blockage.

Unani treatment is most appropriately used as an individualized supportive component around the confirmed diagnosis.

Ilaj-bil-Yad – Procedural and Surgical Treatment

Traditional Unani therapeutics also recognizes the principle of procedural or surgical treatment, commonly described as **Ilaj-bil-Yad**.

This is especially relevant in EDO.

If the problem is fundamentally anatomical, modern endoscopic urological treatment is entirely consistent with the principle of correcting the structural cause.

Today that may mean:

- TURED
- Endoscopic cyst incision
- Selected seminal vesiculoscopy



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Sperm retrieval for ICSI

A responsible integrative approach should recommend the intervention appropriate to the pathology rather than insisting that every condition must be treated orally.

Can Unani Medicine Be Useful Before or After Surgery?

Potentially, as **supportive individualized care**.

The focus may include:

- Nutrition
- Sleep
- Metabolic health
- Psychological stress
- Associated sexual-health concerns
- General recovery

However, herbal or Unani products should be reviewed before surgery because some products can influence bleeding, blood pressure, glucose or interactions with conventional medicines.

A patient should tell both the Unani physician and operating urologist about everything he is taking.

The Saira Health Care Approach to Ejaculatory Duct Obstruction

At **Saira Health Care**, I believe EDO should not be treated simply as:

“low sperm count” or “weak semen.”

It requires anatomical reasoning.

My first objective is to answer:

Is there really an ejaculatory duct obstruction?

This sounds obvious, but it prevents many errors.

Low semen volume can have several causes.

Azoospermia can have several causes.

Painful ejaculation can have several causes.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Only after combining the findings should EDO be diagnosed.

Step 1: Confirm the Semen Pattern

I review:

- Semen volume
- Sperm concentration
- Azoospermia versus severe oligozoospermia
- Sperm motility
- pH
- Collection completeness
- Previous semen analyses

If azoospermia has been reported, I want to know whether the specimen was appropriately examined for rare sperm.

Step 2: Assess Sperm Production

The testes and hormonal profile help determine whether sperm production is likely to be preserved.

A man with normal-sized testes and normal FSH/testosterone fits the obstructive pattern much better than a man with markedly small testes and strongly elevated FSH.

This prevents EDO from being confused with non-obstructive azoospermia.

Step 3: Check the Vas Deferens

Both vasa deferentia should be assessed.

If they are absent, a congenital vasal disorder and CFTR-related infertility become more relevant than isolated EDO.

Step 4: Look for the Clinical Pattern

Low-volume acidic azoospermia with palpable vasa is a particularly important clue.

If symptoms include painful ejaculation or hematospermia, suspicion may rise further.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Step 5: Use Targeted Imaging

When the clinical pattern supports EDO, TRUS is usually the key imaging investigation.

Pelvic MRI can provide additional detail when needed.

I do not believe routine TRUS should be performed on every man with infertility simply because it is available.

Current AUA/ASRM, EAU and Urological Society of India guidance all support **targeted**, not indiscriminate, imaging.

Step 6: Decide Whether the Obstruction Is Correctable

A clear cystic or distal anatomical obstruction may be suitable for endoscopic treatment.

Extensive fibrotic or complex obstruction may be less likely to respond.

The benefits of surgery need to be balanced against ART.

Step 7: Evaluate the Female Partner at the Same Time

This is essential.

If the female partner has good ovarian reserve and no major fertility issue, restoring sperm to the ejaculate may offer natural-conception opportunities.

If she already requires IVF, sperm retrieval with ICSI may offer a more direct route.

Male infertility should therefore be treated as part of the couple's reproductive plan.

Step 8: Integrate Unani Support Responsibly

Once the anatomical and reproductive diagnosis is established, Unani supportive care can be individualized according to:

- General health
- Diet
- Weight
- Metabolic disease



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

- Sleep
- Stress
- Sexual health

But I do not use supportive treatment to postpone medically appropriate correction of a demonstrated obstruction.

Step 9: Reassess Objectively

Improvement should be documented through semen analysis.

A patient should not simply be told:

“Your reproductive system feels stronger now, so the ducts must be open.”

We need objective evidence.

Has semen volume increased?

Have sperm appeared?

Has concentration or motility improved?

This is especially important after treatment.

Saira Health Care's Contribution to Sexual Disorders and Infertility

A focused sexual and infertility clinic can be particularly helpful in conditions that are frequently confused.

At **Saira Health Care**, an important part of my approach is distinguishing:

**EDO from non-obstructive azoospermia,
EDO from CBAVD,
EDO from retrograde ejaculation,
EDO from anejaculation,
and infertility from sexual weakness.**

These distinctions are not merely academic.

Each diagnosis can require a completely different treatment.

For example:

A man with non-obstructive azoospermia may require genetic investigation and possibly micro-TESE.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

A man with CBAVD may require CFTR testing and sperm retrieval.

A man with retrograde ejaculation may require post-ejaculatory urine evaluation and a different fertility strategy.

A man with true EDO may be a candidate for TURED.

Giving all four men the same fertility medicine would therefore be inappropriate.

Why Sexual-Health Expertise Matters in EDO

EDO can also affect the patient's sexual confidence.

Painful ejaculation may make a man afraid to have intercourse.

Reduced ejaculate volume can create anxiety about masculinity.

Azoospermia can produce sexual performance pressure.

Therefore, reproductive treatment sometimes needs to address both the anatomical condition and its psychological/sexual consequences.

A man should understand:

Semen volume does not measure virility.

Sperm count does not measure masculinity.

And a blocked reproductive duct does not mean the man is impotent.

EDO and Infertility: What Couples Should Know

Complete EDO can prevent sperm from reaching the vagina during intercourse.

Natural conception therefore becomes extremely unlikely while complete bilateral obstruction remains.

If surgery successfully restores sperm to the ejaculate, natural conception may become possible.

Alternatively, sperm can often be retrieved and used through ICSI without reopening the duct.

This gives couples two fundamentally different reproductive strategies:

restore the natural pathway or bypass the pathway.

The better choice depends on the couple.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

When Should a Man Be Evaluated for EDO?

Professional assessment is particularly appropriate when infertility occurs together with:

- Consistently very low semen volume
- Azoospermia
- Severe oligozoospermia with poor motility
- Acidic semen
- Painful ejaculation
- Recurrent hematospermia
- Normal-sized testes and normal reproductive hormones
- Imaging suggesting a seminal-vesicle or midline prostatic cyst

No single item proves the diagnosis, but combinations can be highly suggestive.

When Is Urgent Evaluation Needed?

EDO itself is generally not a medical emergency.

However, prompt assessment is appropriate when ejaculation-related symptoms are accompanied by:

- High fever
- Acute severe pelvic pain
- Significant urinary infection
- Acute testicular pain
- Persistent gross blood in urine
- New significant urinary obstruction
- Suspicion of testicular torsion or another acute genital condition

These symptoms may indicate another problem requiring faster treatment.

Common Mistakes I Encourage Patients to Avoid

Assuming every azoospermia case is testicular failure



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Obstructive causes must be considered.

Assuming every low-volume ejaculate is EDO

Incomplete collection, retrograde ejaculation, androgen deficiency and congenital duct abnormalities also matter.

Starting testosterone to improve fertility

Testosterone can suppress sperm production.

Taking antibiotics repeatedly without proof of infection

Established scar obstruction will not necessarily improve with antibiotics.

Assuming a cyst on ultrasound automatically causes infertility

Imaging must fit the clinical picture.

Undergoing TURED solely because semen volume is low

Patient selection is essential.

Waiting years on empirical fertility medicines despite a demonstrated obstruction

A correctable mechanical problem deserves appropriate urological discussion.

Treating only the male partner

Female fertility and reproductive timing need parallel assessment.

Frequently Asked Questions About Ejaculatory Duct Obstruction

Is EDO a common cause of male infertility?

No. It is considered uncommon, accounting for approximately 1–5% of male infertility cases.

Can EDO cause azoospermia?

Yes. Complete bilateral EDO can prevent sperm from entering the ejaculate and produce obstructive azoospermia.

Can EDO cause low sperm count instead of zero sperm?

Yes. Partial obstruction can produce severe oligozoospermia and reduced sperm motility.

Does EDO usually cause low semen volume?



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

Complete bilateral EDO commonly does because seminal-vesicle secretions cannot enter the urethra normally.

Why is the semen acidic?

Seminal-vesicle fluid is alkaline. If it cannot reach the ejaculate, relatively acidic prostatic fluid becomes proportionally dominant. AUA/ASRM uses acidic semen with volume below 1.4 mL as an important clue to complete distal obstruction.

Can semen fructose be absent?

Yes, particularly in complete obstruction, because seminal vesicles normally contribute fructose. However, current AUA guidance notes that fructose testing is relatively unreliable and is not always necessary.

Can EDO cause painful ejaculation?

Yes. Painful ejaculation, perineal discomfort and hematospermia have been reported.

Does EDO cause erectile dysfunction?

Usually not directly. Erection and sperm transport are different functions.

What test is most useful when EDO is suspected?

TRUS is a major first-line imaging tool when the semen pattern genuinely suggests EDO. Pelvic MRI may provide additional anatomical detail.

Does every infertile man need TRUS?

No. Major guidelines recommend targeted TRUS when EDO is suspected, not routine imaging of every infertile man.

Is TURED effective?

It can improve semen parameters and restore natural fertility in appropriately selected patients. In a systematic review of 29 studies involving 634 men, median natural pregnancy after TURED was approximately 25%, but evidence was mainly observational.

Does TURED always restore fertility?

No. Surgical success and pregnancy are different outcomes, and results depend on obstruction type, sperm quality and female fertility.

What are the risks of TURED?

Reported complications include infection, epididymitis, bleeding, hematospermia, urinary reflux into reproductive ducts and, rarely, worsening obstruction.

Is surgery the only fertility option?



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

No. Sperm can often be retrieved from the epididymis or testis and used with ICSI.

Is micro-TESE required?

Usually not for straightforward EDO because sperm production is typically preserved. Simpler epididymal or testicular retrieval methods can often obtain sperm.

Can medicine open a complete EDO?

A fixed structural obstruction usually cannot be reliably corrected by oral medicine alone.

Can Unani medicine help?

Unani medicine can contribute **individualized supportive care** through cause-oriented assessment, diet, lifestyle, metabolic health, stress and appropriate treatment of associated concerns. However, there is currently no high-quality evidence showing that a Unani formulation can reliably reopen a fixed anatomical ejaculatory-duct obstruction.

A Message to My Patients

When a patient tells me:

“Doctor, my semen quantity is very low. Does that mean I do not make sperm?”

I explain that semen volume and sperm production are not the same thing.

Much of the semen comes from the seminal vesicles and prostate.

The testes may still produce sperm even when very little fluid appears outside.

When another patient asks:

“My semen report says azoospermia. Do I need micro-TESE?”

I explain that we first need to establish **why** sperm are absent.

If the testes are producing sperm but the ejaculatory ducts are blocked, this is a very different situation from non-obstructive azoospermia.

And when someone asks:

“Can I take medicine for a few months and open the blockage?”

my answer depends on what is actually blocking the duct.

Inflammation, active infection and certain functional problems may require medical treatment.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com



But a fixed cyst, dense scar or anatomical obstruction may require a structural solution.

The patient's time, money and reproductive opportunities should not be wasted by pretending otherwise.

About Dr. Nizamuddin Qasmi

Dr. Nizamuddin Qasmi

Founder & Chief Physician, Saira Health Care
Focused Practice in Sexual Disorders & Infertility

Professional Education and Additional Training

BUMS – Hamdard University, Delhi

MD

CGO

Certificate in Infertility – MGBIMS, Delhi

Certificate in Urology – London, UK

Masters in Male Infertility – MasterHealthPro (HealthPro)

Integrated Sexual and Reproductive Health – ISRH, UNFPA

Saira Health Care's published physician profile identifies Dr. Nizamuddin Qasmi as Founder and Chief Physician with a focused clinical practice in sexual disorders and infertility and lists the above professional education and training.

At **Saira Health Care**, the clinical focus in male infertility includes differentiating abnormalities of sperm production, sperm transport, ejaculation, reproductive hormones and sexual function.

For a condition such as EDO, the appropriate approach may involve semen-analysis interpretation, reproductive hormonal evaluation, assessment for obstructive versus non-obstructive azoospermia, counselling about fertility options, individualized Unani supportive care and coordination with an appropriately trained urologist/andrologist or IVF laboratory where endoscopic treatment or sperm retrieval is required.

Why Saira Health Care's Sexual and Infertility Focus Is Relevant

A patient rarely arrives saying:

“I definitely have an ejaculatory duct obstruction.”

He arrives saying:

“My semen is very little.”



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

or:

“No sperm were found.”

or:

“Ejaculation hurts.”

or:

“We have been married for years but pregnancy has not occurred.”

These complaints can arise from completely different diseases.

The contribution of focused sexual and infertility care is therefore not simply providing a fertility medicine.

It is recognizing the **mechanism behind the complaint.**

At Saira Health Care, my preferred philosophy is:

first classify the problem, then treat it.

That philosophy is equally consistent with modern andrology and the traditional Unani emphasis on identifying causative factors.

Conclusion

Ejaculatory Duct Obstruction is an uncommon but potentially treatable cause of male infertility in which one or both ejaculatory ducts become partially or completely obstructed.

Complete bilateral EDO classically produces:

low-volume, acidic, azoospermic semen in a man whose testes and reproductive hormones are often relatively normal.

Partial obstruction may instead present with:

severe oligozoospermia, poor sperm motility, reduced semen volume, painful ejaculation or hematospermia.

The diagnosis should be made carefully.

The WHO sixth-edition semen manual remains the international reference for standardized semen laboratory assessment, while current AUA/ASRM and EAU guidance recommends **TRUS or selected pelvic MRI when the semen pattern genuinely suggests distal obstruction.**

Treatment depends on the anatomy and the reproductive goals of the couple.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com

For appropriately selected structural EDO, **TURED** can reopen the ducts and may restore sperm to the ejaculate. In the largest systematic review, semen parameters improved in a substantial proportion of patients and the median natural-pregnancy rate was approximately 25%, although the evidence remains mainly retrospective and should not be interpreted as a guaranteed success rate.

Other selected approaches can include cyst incision, seminal vesiculoscopy, dilation or laser treatment. When reconstruction is inappropriate or unsuccessful, **epididymal or testicular sperm retrieval followed by ICSI** provides an alternative route to biological parenthood.

From an **integrative Unani perspective**, EDO highlights the importance of **cause-oriented medicine**. Diet, lifestyle, metabolic health, sleep, stress and appropriate individualized Unani treatment can support the patient's overall reproductive health. But scientific responsibility requires acknowledging that **a fixed anatomical blockage cannot be assumed to reopen through herbal or oral therapy alone**.

At **Saira Health Care**, my approach is therefore to combine careful male-infertility assessment with appropriate Unani supportive principles while recognizing when modern imaging, reproductive urology, endoscopic surgery or assisted reproduction is required.

The most useful question is not simply:

“How do we increase this man's sperm count?”

It is:

“Are sperm being produced but prevented from reaching the semen—and if so, where is the obstruction and what is the most appropriate way to restore or bypass that pathway?”

Once we answer that question correctly, treatment becomes much more precise.

Saira Health Care: www.sairahealthcare.com

Appointment & Consultation: [Book an appointment](#)

Saira Health Care Pharmacy: pharmacy.sairahealthcare.com

Medical Disclaimer: This article is intended for medical education and general patient awareness. It does not replace individualized semen analysis, hormonal evaluation, imaging, urological/andrological assessment or infertility treatment. Low semen volume, azoospermia, painful ejaculation and hematospermia have multiple possible causes and should not be self-diagnosed as ejaculatory duct obstruction. TURED and other procedures should be undertaken only after appropriate specialist evaluation. Unani medicines, herbal products, antibiotics, hormones, testosterone or fertility



+91-9452580944



+91-5248-359480



www.sairahealthcare.com



supplements should not be used to delay necessary investigation or surgical/reproductive treatment. No surgical, medical, Unani or assisted-reproductive treatment can guarantee natural pregnancy or live birth.



+91-9452580944



+91-5248-359480



www.sairahealthcare.com