International Journal of Homoeopathic Sciences

**E-ISSN:** 2616-4493
**P-ISSN:** 2616-4485
www.homoeopathicjournal.com
IJHS 2025; 9(2): 968-973
Received: 20-04-2025
Accepted: 21-05-2025

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# Homoeopathic case presentation on tracheoesophageal fistula complications and its management

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**DOI:** https://www.doi.org/10.33545/26164485.2025.v9.i2.O.1614


## Abstract
Tracheoesophageal Fistula (TEF) is a condition where the trachea and esophagus are connected in an abnormal way, which can happen either at birth or later on. If left untreated, it can lead to some serious complications like choking, coughing, frequent respiratory infections, and other critical issues.

When it comes to treating TEF, especially the congenital type, surgery is typically required soon after birth. Homoeopathy can be a helpful addition to the treatment plan by managing symptoms, supporting recovery, and preventing complications during the healing process after surgery. While surgery is the primary treatment, ensuring good postoperative care is crucial for a smooth recovery and enhancing overall quality of life.

Homoeopathy can aid in recovery from TEF surgery by strengthening the immune system, promoting growth, lowering the risk of respiratory infections, effectively work on post-surgery complications like esophageal strictures, improving swallowing, reducing aspiration risks, enhancing digestion, and contributing to improves overall health.

We're thrilled to share a case of an infant diagnosed with tracheoesophageal fistula, and it's great to experience that it rivaled significant management in her post-surgery complications esophageal strictures, and improvement of digestive and respiratory symptoms.


**Keywords:** Tracheoesophageal Fistula (TEF), homoeopathic management, postoperative complications, homoeopathy enhancing quality of life

## Introduction
Tracheoesophageal Fistulas (TEFs) are prevalent congenital anomalies in paediatric surgical settings, often presenting with respiratory distress, feeding difficulties, choking, and a higher risk of aspiration. These conditions frequently coexist with other congenital defects, particularly heart anomalies. Early diagnosis is crucial for effective treatment, typically achieved through prenatal ultrasounds and postnatal imaging techniques, which help identify the specific type of TEF and inform clinical management.

Surgical intervention is the primary treatment for TEF, focusing on closing the fistula and reconnecting the esophagus. The timing of surgery is influenced by the infant's health status and any associated congenital issues. TEFs result from improper separation of the caudal foregut during early embryonic development, leading to abnormal connections between the trachea and esophagus.

A study involving 227 cases of esophageal atresia and TEF repair highlighted several complications, including anastomotic leaks (16%), esophageal strictures (35%), and recurrent fistulae (3%). Esophageal strictures can often be treated with endoscopic balloon dilation, while tracheomalacia was observed in 15% of cases, with a significant portion requiring surgical intervention. Other complications include disturbed peristalsis and delayed gastric emptying, which can contribute to Gastroesophageal Reflux Disease (GERD) and aspiration. Dietary modifications and management strategies are essential for addressing these complications.

Homoeopathy plays a dynamic role in managing symptoms, supporting recovery, and preventing complications, particularly in the context of post-operative care. As a holistic and personalized medical approach, Homoeopathy provides essential support during the post-surgical phase of Tracheoesophageal Fistula (TEF) treatment by addressing several key areas:

- Effective management of post-operative complications esophageal constriction, along with reducing the risk of aspiration - a serious complication that may occur post-surgery can be effectively addressed.

- Effectively managing gastroesophageal reflux, which can be a significant issue for patients recovering from TEF surgery
- Decreasing the chances of recurrent respiratory infections, a common concern following surgery.
- Aiding in digestion and increasing feeding tolerance, which is crucial for nutritional recovery.
- Enhancing the body's overall immune response and boosting energy levels, which are vital for recovery.
- Promoting faster healing of surgical wounds, thereby reducing recovery time and improving outcomes. Promptly act on post-surgical complications

Through these mechanisms, Homoeopathy contributes to a more comprehensive and effective post-operative care plan, ultimately enhancing patient well-being and recovery.

**Case report**

A 5.5-year-old female visited the clinic on 23rd September 2023 with a history of recurrent respiratory tract infections (URTI), gastroesophageal reflux disease (GERD), and associated symptoms.

The patient's symptoms began in March 2023 with an initial episode of acid reflux, characterized by a burning sensation in the esophagus, which subsequently triggered coughing due to lung irritation and led to fever. Prior to the first visit of clinic, the frequency and intensity of acid reflux episodes had gradually escalated, occurring nearly five days a week, which led to recurrent upper respiratory tract infections. Her parents built a specialized bed that elevates her upper body at a $45^0$-degree angle to help prevent acid reflux. These concerns have significantly impacted on her quality of life, resulting in a considerable number of school absences

The initial radiological investigation reports indicated the presence of a Tracheoesophageal Fistula (TEF) post-surgical complication, along with a gradual development of esophageal strictures, these strictures moderately impede the swallowing of food, requiring patients to consume their meals in small bites, which significantly prolongs mealtime and causes exertion. This situation leads to a poor appetite, ultimately restricting the child's weight gain and growth milestones of middle childhood and the patient also reported occasional stomach pain, frequent lower extremity pain at night, and headaches that appeared to be associated with daily GERD episodes while lying down, so much, so that she was afraid to sleep at night.

**Medical and Treatment history**

- Patient has a history of congenital TEF, which was operated on in 2017 at the age of 2 days.
- Tendency of recurrent URTI.
- General Debility

**Family history**

Mother - Tuberculosis - Cured
Father - Rickets

**Immunization-** On time done
**Physical generals**
**Weight:** 18.8kg
**Height:** 123.9cm
**Temperament:** Afebrile
**Tongue:** Clear
**Thirst:** Less, 1.5 litres/day
**Appetite:** Low
**Thermal:** Hot
**Perspiration:** Moderate
**Bowel:** Normal
**Stool consistency:** Normal
**Bladder:** Normal
**Sleep:** disturbed due to acid reflux, leading to burning in esophagus
**Dreams:** Nothing specific

**General modalities**
**Desire:** Like salty
**Aversion:** Nothing specific

**Mental generals**

- Moderately Irritable$^{++}$
- Easily get Anger$^{+}$
- Lack of concentration in study.

**Miasmatic diagnosis:** Psora, Syphilis, Sycosis

**Case analysis**

Clinical Assessment and Management Plan- A comprehensive case analysis was performed to understand the patient's constitutional makeup and individualized symptom profile, guiding the selection of an appropriate Homoeopathic remedy aimed at addressing the underlying causes of difficulty in swallowing, GERD and recurrent respiratory infections.

**Provisional diagnosis-complications of TEF**

**Therapeutic intervention**

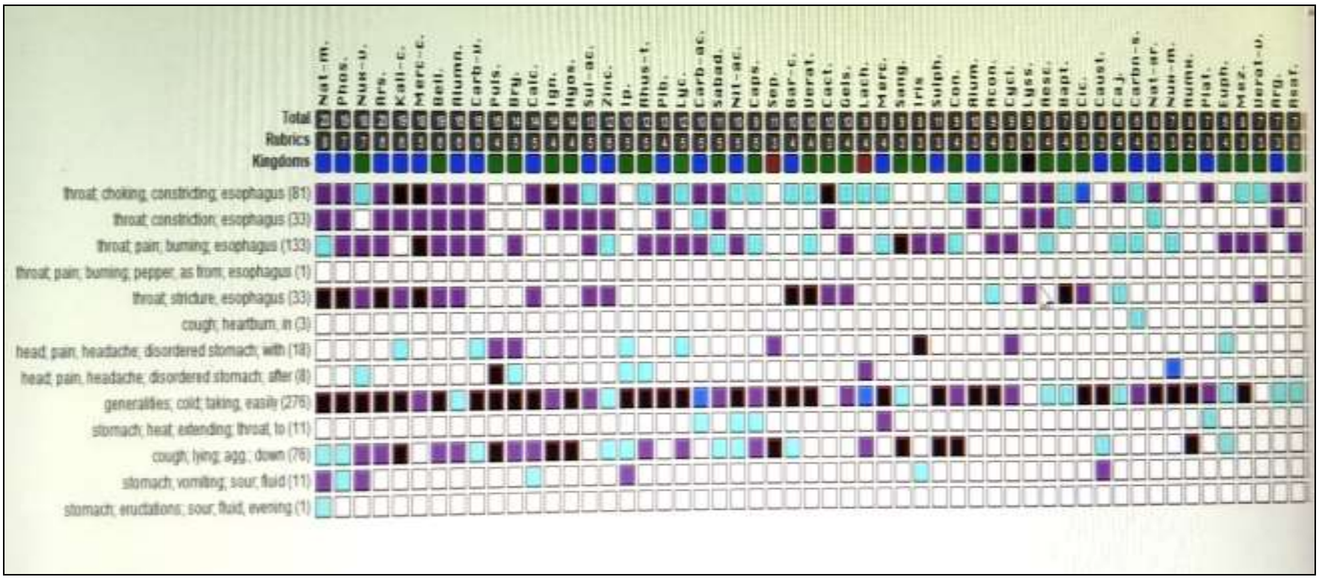
Treatment focused on:

- Post-surgical Tracheoesophageal Fistula (TEF) complication, development of esophageal strictures (difficulty in swallowing)
- Enhancing immunity, growth improvement
- Managing GERD and improving digestion
- Reducing frequency and severity of respiratory infections
- Improve quality of life
- Aiding tissue healing and systemic balance

**Rubrics for repertorization:** from the totality of symptoms below, rubrics were evaluated

**Rubrics**

- Throat, choking, constriction, esophagus (81)
- Throat, constriction, esophagus (33)
- Throat, pain, burning, esophagus (133)
- Throat, pain, burning, pepper, as from, esophagus (1)
- Throat, stricture, esophagus (33)
- Cough, heartburn, in (3)
- Head, pain, headache, disordered stomach, with (18)
- Head, pain, headache, disordered stomach, after (8)
- Generalities, cold, taking, easily (276)
- Stomach, heat, extending, throat, to (11)
- Cough, lying, agg, down (76)
- Stomach, vomiting, sour, fluid (11)
- Stomach, eructations, sour, fluid, evening (1)




**First prescription:** On 23rd September 2023, at the initiation of treatment the patient was prescribed *Tuberculinum* 1M, administered as a single dose, which was recommended later throughout the case management as an intercurrent remedy. This was followed by *Natrum muriaticum* 30, given in five doses over three days, to address the chronic constitutional layer. Subsequently, *Calcarea carbonica* 200 was prescribed in three doses within a day to reinforce the patient's individual susceptibility of recurrent infection pattern. To continue the constitutional support and manage systemic symptoms, *Phosphorus* 200 was given in four doses across two days. *Lycopodium* 30 was administered as 3 pills three times a day for two days, followed by *Pulsatilla* 200 (3 pills twice daily for two days) to manage the GERD symptoms. Thereafter, *Sanguinaria canadensis* 30 was introduced as a dose of 3 pills twice daily for three days, considering respiratory or vascular indications. Subsequently, *Alumina* 30C was started at a dosage of one drop twice a day (B.D.). After noting significant progress in the healing of esophageal stricture and alleviation of dysphagia, the frequency was reduced to once daily (O.D.) at bedtime Throughout this sequence, *Carbo vegetabilis* 30 was continued as a daily supportive medicine, prescribed as 3 pills twice a day to aid digestion and general vitality.

**Follow-up and outcome**

The patient was treated with a sequence of carefully selected remedies including *Natrum mur, Sulphur, Calcarea carb, Phosphorus, Lycopodium, Pulsatilla, Silicea, Acid fluor, Tuberculinum, Antim tart, Alumina* and others. Repeated cycles were administered based on symptom evolution and constitutional indications.

**Table 1:** Key Remedies and indications applied during treatment

| Remedy | Key indications |
|---|---|
| Natrum mur | Emotional reserve, chronic reflux, morning cough |
| Calcarea carb | Recurrent infections, sour belching, delayed milestones |
| Phosphorus | Laryngitis, burning in chest, craving cold food |
| Lycopodium | Bloating, weak digestion, fear of being alone |
| Pulsatilla | Clinginess, shifting symptoms, intolerance to fats |
| Silicea | Low immunity, tendency to catch cold easily |
| Alumina | Food cannot pass, esophagus contracted. Feels as if splinter or plug were in throat |
| Acid fluor | Tissue degeneration, fistula-related pathology |
| Antim tart | Mucus rattling, respiratory congestion |

**Table 2:** Patient's follow-ups - observations

| Visit | Date | Key observations | Outcome |
|---|---|---|---|
| 1 | 11 Oct 2023 | Difficulty in swallowing, GERD & URTI slightly improved, fungal toe infection noted | Initial improvement in primary complaints |
| 2 | 30 Oct 2023 | Salivation during sleep, facial eruptions | Stable; minor new symptoms |
| 3 | 6 Nov 2023 | Cold, runny nose, mild fever | Acute cold symptoms appeared |
| 4 | 14 Nov 2023 | Nasal blockage, rattling cough, throat pain | Quick recovery in 6 days |
| 5 | 12 Dec 2023 | Morning cough post ice cream | Cough recurrence; linked to cold food |
| 6 | 19 Sep 2024 | GERD reduced to 2-3/week, burning controlled | Significant GERD improvement |
| 7 | 25 Sep 2024 | Fever, cough, nasal block, thick sputum | Respiratory infection with fever |
| 8 | 8 Oct 2024 | Cold due to weather, nasal congestion | Weather-induced cold symptoms |
| 9 | 14 Oct 2024 | Night cough, thick discharge, throat irritation | Persistent throat & nasal issues |
| 10 | 23 Oct 2024 | All complaints better; hawking persists | Marked improvement, minor residuals |
| 11 | 18 Nov 2024 | Cold, red nostrils, watery eyes | Mild URTI signs; appetite good |
| 12 | 22 Nov 2024 | Umbilical pain post food, blocked nostril | Gastrointestinal upset; improved soon |

| | | | |
|---|---|---|---|
| 13 | 30 Nov 2024 | Routine follow-up | Stable; remedy cycle repeated |
| 14 | 10 Dec 2024 | Fever, cough, throat burn, headache | Fever with congestion & dullness |
| 15 | 13 Dec 2024 | Vomiting green mucus, chest congestion | Worsening symptoms; managed well |
| 16 | 19 Dec 2024 | Cough reduced, scabs in nose, throat clearing, Difficulty in swallowing, feeling something stuck in throat | Stable with occasional cough |
| 17 | 28 Dec 2024 | Mild cough, runny nose | Minor URTI, low water intake |
| 18 | 5 Jan 2025 | Morning cough, nasal discharge | Controlled symptoms with supportive care |
| 19 | 25 Jan 2025 | All complaints better | Significant improve noted in esophageal constriction Well maintained; remedy cycling continued |
| 20 | 25 Feb 2025 | No complaint; no dilatation needed, | Radiological investigation report demonstrated, esophageal constriction resolved, Stable; no further intervention needed |

### Case outcome analyses

Gradual and sustained improvement was observed across several domains:

### 1. Timeline of clinical progress

**Table 3:** Month-wise clinical observations and patient progress

| Month | Observations |
|---|---|
| Month 1 | GERD episodes reduced, appetite slightly improved |
| Month 2 | Frequency of URTIs decreased, better sleep quality |
| Month 3 | Reduced use of antacids, less nocturnal coughing |
| Month 4-5 | Significant improvement observed in difficulty in swallowing of food, Appetite much improved along with growth parameters like more energy, prompt improvement observed in Weight gain, growth and other milestones. |
| Month 6+ | No need for esophageal dilatation; Clinically Significant relieve from post-surgical complication esophageal strictures, overall clinical stability maintained |

### 2. Improvement in quality of life

### Academic, social, emotional wellbeing

**Table 4:** Month-wise psychosocial and academic progress during treatment

| Observation period | School Attendance & Participation | Cognitive function (Concentration, memory, academic performance) | Social interaction (Group participation) | Self-esteem & confidence | Stress & illness coping | Impact of medical condition on academics |
|---|---|---|---|---|---|---|
| Before treatment | Frequently absent | Moderate difficulties | Rarely engaged | Low | Moderate emotional burden | Moderately disruptive |
| Month 1 | Occasionally absent | Slight improvement | Minimal engagement | Moderate | Mild emotional burden | Mild academic impact |
| Month 2 | Occasionally absent | Continued mild improvement | Gradual improvement in participation | Moderate | Mild emotional burden | Mild academic impact |
| Month 3 | Occasionally absent | Noticeable improvement | Actively engaging in group activities | Moderate | Mild emotional burden | Mild academic impact |
| Month 4-5 | Rarely absent | Significant improvement | Consistent and willing participation | Moderate | Mild emotional burden | Minimal academic impact |
| Month 6+ | Regular attendance | Highly improved academic performance | Active and confident social participation | Excellent | Mild emotional burden | Negligible academic impact |

### Physical health and functional well-being observations

**Table 5:** Month-wise clinical and functional health improvements

| Observation period | Hospital/ clinical visit frequency | Sleep quality & restfulness | Appetite & difficulty in swallowing of food | Nocturnal drooling | Daytime energy levels | Functional limitations due to illness |
|---|---|---|---|---|---|---|
| Before treatment | Frequent | Poor | Poor, much difficult | Moderately present | Low | Frequently experienced |
| Month 1 | Frequent | Slight improvement | Slight improvement, | Moderately present | Low | Frequently experienced |
| Month 2 | Occasional | Slight improvement | Slight improvement | Moderately present | Moderate | Occasionally experienced |
| Month 3 | Occasional | Slight improvement | Slight improvement | Mild presence | Moderate | Occasionally experienced |
| Month 4-5 | Occasional | Significantly improved | Significantly improved | Mild presence | Moderate | Occasionally experienced |
| Month 6+ | Rare | Significantly improved | Significantly improved | Nearly absent | Consistently good | Rarely experienced |

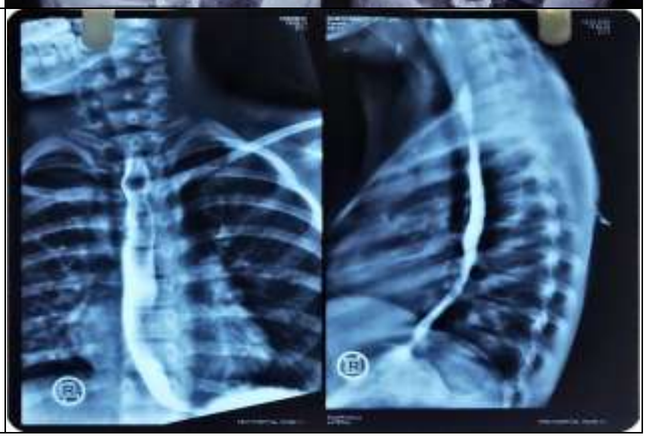
### Investigation reports

**Table 6:**

| Sr. No. | Date | Report Impression/Findings |
|---|---|---|
| 1 | 4/12/2017 | Tracheoesophageal Fistula Operated |
| 2 | 28/11/2022 | X-RAY CHEST PA VIEW<br>Both hila are normal.<br>Broncho vascular markings are prominent.<br>Cardio -thoracic ratio is normal. |
| 3 | 13/03/2023 | CT Scan Chest Virtual Bronchoscopy - Clinical suspicion of foreign body.<br>CT chest with virtual bronchoscopy reveals no conclusive evidence of any radio opaque foreign body.<br>Multifocal lung consolidations (predominantly in the dependent bronchial tree territory).<br>The posterior wall of trachea shows a focal out pouching at D4 vertebral level, along with an air-filled tract (1.6mm diameter) This extends inferiorly and probably abuts the esophagus (possibility for tracheo-oesophageal communication/ fistula needs exclusion).<br>Also noted is bilateral maxillary, right ethmoid and sphenoid sinusitis. |
| 4 | 15/03/2023 | Cytological Test- Microscopic:<br>Smears made from received BAL fluid show numerous neutrophils, few lymphocytes & occasional clumps of benign respiratory epithelial cells on the background of mucin & degenerated cells.<br>No tubercular granuloma or malignancy seen in smear studied.<br>Impression: Suppurative inflammation<br>Bronchoscopy -<br>Patent orifice seen in Lower One third of Posterior Tracheal Wall. |
| 5 | 21/03/2023 | Scan for GERD<br>Scan features are suggestive of frequent episodes of high-level gastroesophageal reflux (in the upper half of the esophagus). |
| 6 | 12 /2/ 2025 | No Significant abnormality seen |

**Before Treatment:** 13th July 2024
There is irregular narrowing observed in the esophagus, suggestive of esophageal stricture - a common post-surgical complication in patients with a history of Tracheoesophageal Fistula (TEF) repair.

**After Treatment:** 12th Feb 2025
No Significant abnormality Seen



### Discussion

This case demonstrates the significant role of Homoeopathy as an effective treatment for managing post-operative complications of Tracheoesophageal Fistula (TEF), especially esophageal stricture and related functional impairments. The Remedies were chosen based on the patient's evolving symptoms, clinical progress, and unique characteristics. A comprehensive homeopathic strategy was implemented, alternating between deep-acting constitutional remedies (like *Calcarea carb, Silicea, Lycopodium, and Phosphorus*) and acute-phase remedies (such as *Hepar sulph, Antim tart*, and *Arsenic album*), all tailored to the patient's changing needs. The Intercurrent remedy administrated (*Tuberculinum*) to accelerate the process of cure and for the removal of any hindrance found in the process of cure, Supportive remedies (like *Capsicum, Alumina*, and *Sanguinaria nit*) were also included to help stabilize the child on a daily basis. Crucially, esophageal dilatation was avoided, and there were no any adverse effects or aggravations experienced, which underscores the safety of homoeopathy in managing chronic paediatric conditions. This case emphasizes the potential of homeopathy to aid in both functional and psychosocial recovery, complementing conventional post-surgical care.

## Conclusion

This case report highlights the promise of Homoeopathy as a safe, effective, and personalized treatment option for managing chronic post-operative complications in a child with a history of congenital Tracheoesophageal Fistula (TEF). The entire treatment regimen was notably well-tolerated, with no observed adverse reactions or Homoeopathic aggravations. This favorable outcome underscores the safety and excellent tolerability profile of Homoeopathy, particularly crucial for vulnerable paediatric populations with complex chronic surgical histories. By combining constitutional and acute Homoeopathic remedies, we observed significant improvements in the child's Physical, Emotional, Psychological and Quality of life with social wellbeing.

The patient's consistent progress, along with a decreased reliance on conventional treatments like esophageal dilatation, showcases the potential of Homoeopathy in providing long-term supportive care. The absence of adverse drug effects throughout the treatment duration reinforces its safety in paediatric patients with complex medical histories.

## Homeopathic aggravation

No Homoeopathic aggravation was noted in the case.

## Ethical approval

Institutional Review Board approval is not required.

## Declaration of patient consent

The authors certify that she has obtained appropriate patient consent.

## Conflicts of interest

There are no conflicts of interest

## Funding

None.

## Acknowledgements

None

## References

1. Salik I, Paul M. Tracheoesophageal fistula. In: StatPearls. Treasure Island (FL): StatPearls Publishing; 2025 Jan. Available from: https://www.ncbi.nlm.nih.gov/books/NBK559114/
2. Ayaz E, Haliloglu M. Radiologic diagnosis of tracheoesophageal fistula in children. Curr Chall Thorac Surg. 2022 Aug 25;4:41. doi:10.21037/ccts-20-161. Available from: http://dx.doi.org/10.21037/ccts-20-161
3. JIMS Homoeopathic Medical College & Hospital. Surgery and homoeopathy. Indian Journal of Applied Homoeopathy. 2021 Jul-Sep;15(3):1-48.
4. Boericke W. Pocket manual of homœopathic materia medica. New Delhi: B. Jain Publishers Pvt Ltd., c2008, p. 1-1050. (original 1922 edition, reprinted 2008)
5. Boericke W. Boericke's new manual of homoeopathic materia medica with repertory. 2nd ed, 40th impression. New Delhi: B. Jain Publishers Pvt Ltd., c2017. p. 1-1550.
6. Murphy R. Homeopathic medical repertory: a modern alphabetical and practical repertory. New Delhi: B. Jain Publishers Pvt Ltd., c2010. p. 1-2320.
7. Murphy R. Lotus materia medica. 3rd ed. New Delhi: B. Jain Publishers Pvt Ltd., c2015. p.1-1450.
8. MacRepertory (Complete Repertory). New Delhi: B. Jain Publishers; [accessed 2025 Jan 10]. Available from: https://www.macrepertory.com

**How to Cite This Article**
Sharma S. Homoeopathic case presentation on tracheoesophageal fistula complications and its management. International Journal of Homoeopathic Sciences 2025; 9(2): 968-673.