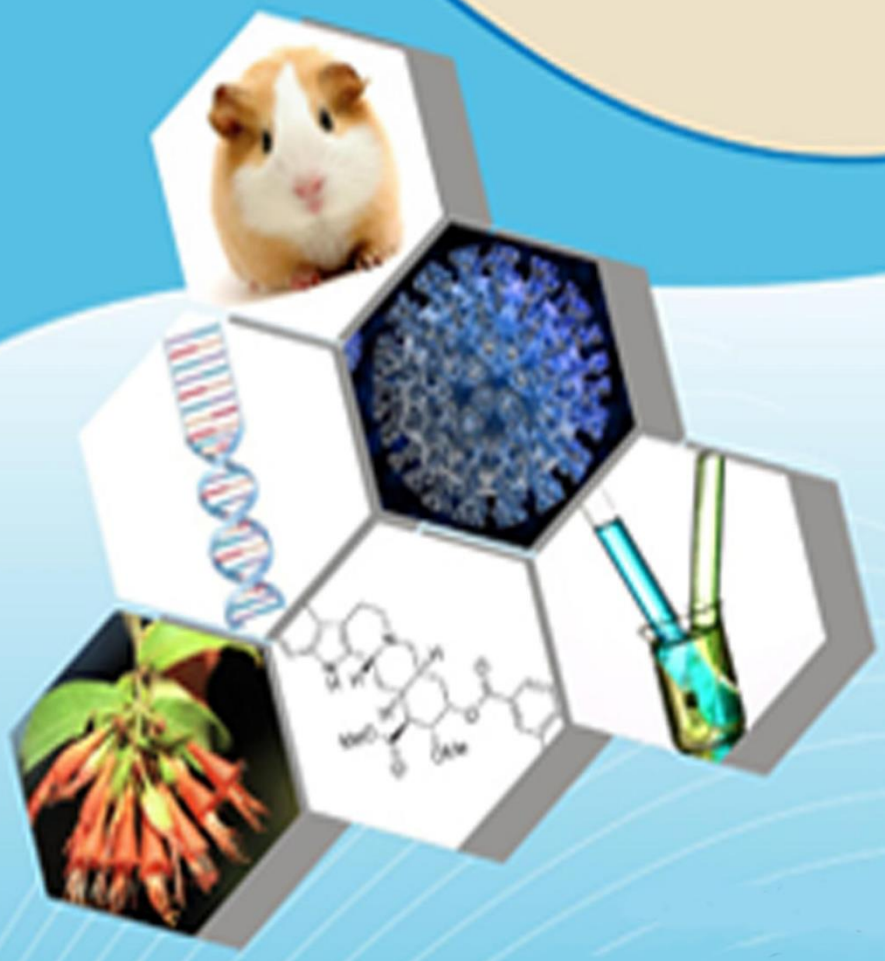
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A case study of adenomyomatosis of the gallbladder, with constitutional homoeopathic treatment.

Joyti Patil

Abstract

Adenomyomatosis of the gallbladder is defined by the hypertrophy of the mucosal epithelium and the invagination of this epithelium into the interstices of a thickened muscularis, resulting in the formation of Rokitansky-Aschoff sinuses. The gallbladder contains three types of adenomyomatosis: segmental, fundal, and diffuse. An indication for surgical intervention is symptomatic adenomyomatosis [1]. A seventeen-year-old female presented with a two-year history of recurrent upper abdominal discomfort.The characteristics of gallbladder adenomyomatosis are demonstrated by abdominal ultrasonography. Pulsatilla was administered subsequent to a comprehensive casetaker, analysis, evaluation, and repertorization. The ultrasound scan report of the abdomen after homoeopathic treatment indicates that the gallbladder contour is normal, and the abdominal discomfort was completely alleviated. This outcome indicates that constitutional homoeopathic treatment is efficacious in the treatment of biliary adenomyomatosis.

Keywords: Gallbladder Adenomyomatosis, Rokitansky- Aschoff sinuses, Cholecystectomy, Pulsatilla,Constitutional homoeopathic remedy

1. Introduction

Adenomyomatosis of the gallbladder is a benign condition that is distinguished by hyperplasic alterations in the gallbladder wall, proliferation of the mucosa, thickening of the muscular wall, and the formation of Rokitansky-Aschoff sinuses [2, 3].

1.1. Epidemiology

Incidence of Gallbladder adenomyomatosis (GA) increases with age and usually a female predilection (M:F=1:3) [15]. Females are more predisposed to gallbladder diseases, including gallstones, adenomyomatosis and gallbladder carcinoma [4]. Aetiology of adenomyomatosisis unknown [5].

1.2. Pathology

The gallbladder may be affected by adenomyomatosis lesions, which are classified as focal (fundal), segmental, and occasionally diffuse. These lesions have no malignant potential. The focal type is the most prevalent and typically affects the gallbladder fundus [2]. Fundal GA is characterized by focal hypertrophy of the gallbladder fundus, while segmental GA is characterized by circumferential overgrowth of the gallbladder wall, which results in the formation of compartments. Disseminated hypertrophy and irregularity of the mucosa and muscularis are observed in diffuse GA [6]. Rokitasky-Aschoff sinuses (RAS) are defined by microscopic or macroscopic pseudo diverticular or cavities in the gallbladder. Histologically, they are characterized by the out pouching of gallbladder mucosa into the gallbladder muscle layer and subserosal tissue, which leads to hyperplasia and herniation of epithelial cells into the fibromuscular layer of the gallbladder wall [7].

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1.4. Diagnosis

A correct diagnosis of GA is neccessary in order to avoid unnecessary cholecystectomies. Ultrasound scan is the imaging modality of choice for diagnosing adenomyomatosis [9]. Usually sonographically evident gallbladder wall thickening has its aetiology in inflammatory or neoplastic conditions, with cholecystitis. The diffuse wall thickening with intramural diverticula forming the "Rosary sign" and "Pearl necklace sign" and hourglass configuration of the gallbladder usually confirm the radiological diagnosis [10]. GA is uncommon and need to be distinguished from other similar conditions such as choledocholelithiasis, sclerosing cholangitis, carolis disease and choledochal cyst.

1.5. Treatment

Symptomatic adenomyomatosis especially abdominal pain or hepatic colic even in the absence of gallstones is an indication for cholecystectomy. Surgical intervention is the first choice of treatment for patients with GA [11, 12].

2. Methods

A case of Gallbladder Adenomyomatosis treated with homoeopathic constitutional remedy. Ultrasonograghy results showed diffuse wall thickening (8.2mm) of Gallbladder with obliteration of the lumen in some areas showing the characteristic hourglass appearance of Adenomyomatosis, which resolved after homoeopathic treatment and evaluated through abdominal USG.

2.1. Case Summary

A 17 year old girl presented with recurrent attack of upper abdominal pain of 1 year duration. Pain was aggravated by eating (++), fried food, potato, fatty food and during night (++). Pain relieved by lying on abdomen (+++) and pressure.

2.1.1. History of presenting complaint.

Complaint started 2 years back as pain in abdomen which gradually increased in intensity. Took allopathic medicines from the medical college hospital Kottayam. Ultrasonography dated 24 /5 / 2018 showed gallbladder wall grossly thickened [8.1mm] showing an hourglass appearance and diagnosed as adenomyomatosis of gall bladder. No relief from allopathic medications for 1 year. History of recurrent attack of abdominal pain and intensity of pain also increased. Ultrasound scanning on 9 /4 /2019 reveals diffused gall bladder wall thickening [8.2mm] and hourglass appearance. Features were consistent with adenomyomatosis. Patient reported to our hospital on 10 /4 /2019 with severe pain in upper abdomen immediately after eating, especially after fatty food, fried items, pulses and tubers, and pain was more during night hours.

2.1.2. Past History

History of breathing difficulty in childhood and relieved after allopathic medications.

2.1.3. Family History

Mother suffering from allergic contact dermatitis.

2.1.4. Physical Generals

Appetite was increased. Patient desires cold food, sweets, chocolates and fried food. Thirst was reduced, desires cold water. Sweat was more on face and neck. Patient desires fanning and open air and desires bathing in cold water cold climate. Thermally hot.

Menstrual history: Menarche at the age of 13. Menses regular, last for 7 days, pain in lower abdomen, and extremities during first 2 days.

2.1.5. Mental Generals:

Weeps easily, like pets

2.2. Evaluation

- Weeps easily
- Like pets
- Desire cold food
- Desires cold water
- Desire sweets
- Desire chocolates
- Desire fried food
- Desire open air
- Thermally hot
- Pain in upper abdomen
- < after eating
- < fried food
- < during night
- > lying on abdomen
- > pressure

2.3. Remedy selection

Phosphorus and Pulsatilla nigricans were the first two remedies on repertorisation. Patient was hot. So the chilly remedy was excluded. Pulsatilla was selected as the similimum on the basis of totality of symptoms (weeps easily, love for animals, desire for open air, thermally hot, desire cold food, desire cold drinks, desire sweets, desire chocolates, pain abdomen night aggravation, pain after eating aggravation). Pulsatilla 200 single dose was prescribed on 10/04/2019 and followed by placebo in the form of globules of 40 sizes, QID for one month.

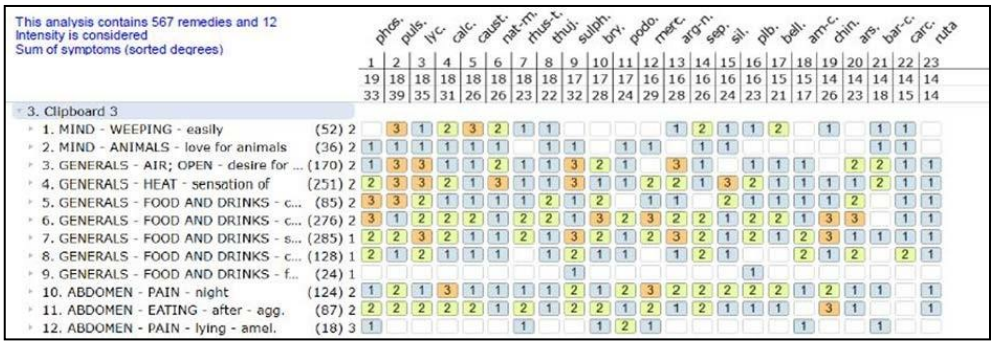


Fig 1: Repertorisation chart

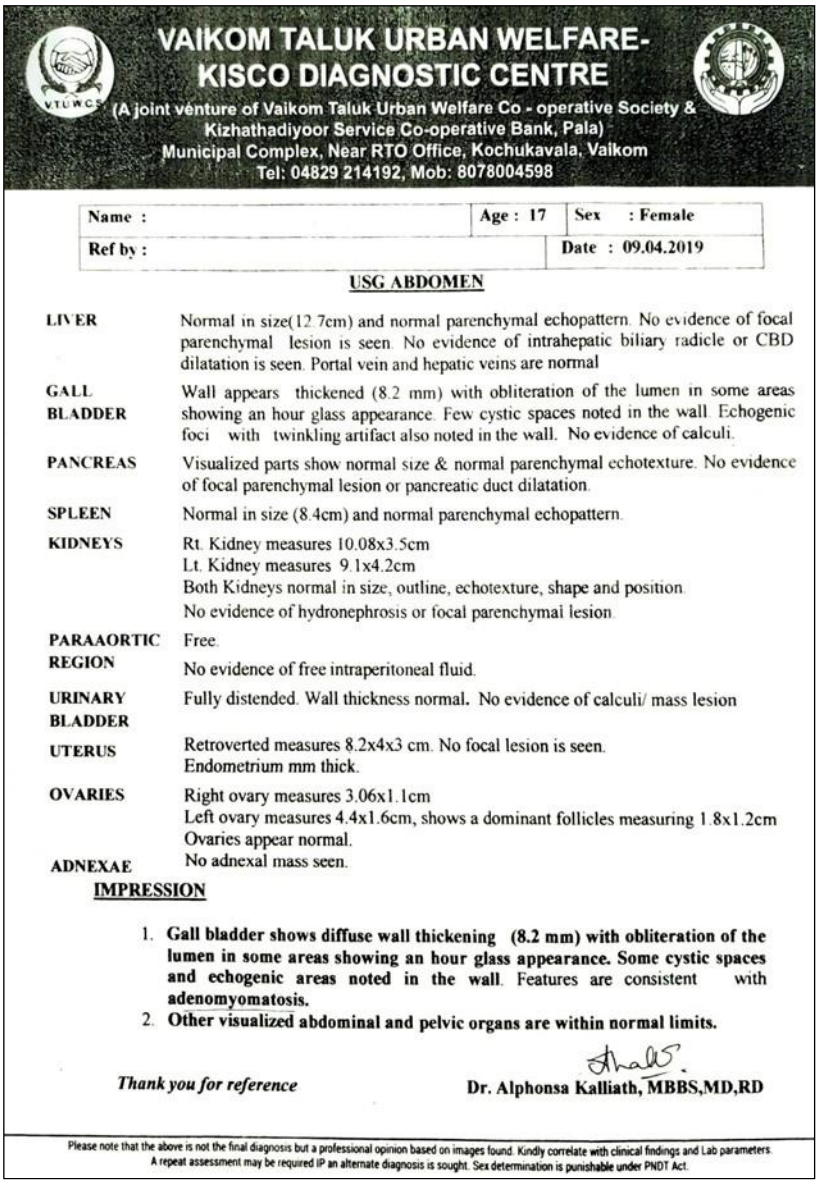
Table 1: Follow-up chart

SI NO	Date	Observation	Prescription
1	11/5/2019	No history of pain for 3wks.Pain in upper abdomen++, after taking fatty food, night, < 2days.	Pulsatilla 200/1 dose
2	8/6/2019	No history of pain till 7/6/19.but history of severe pain yesterday, sleeplessness due to pain.	Pulsatilla200/1dose
3	13/7/2019	No history of pain, sleep normal, appetite normal.	Placebo
4	10/8/2019	Pain after taking milk, intensity reduced, menses delayed.	Pulsatilla200/1dose
5	14/9/2019	Frequency and intensity of pain reduced, even after fattyfood. menses appeared.	Placebo
6	12/10/2019	Regular menses, no history of pain.	Placebo
7	9/11/201	Menses delayed for 2 weeks, dysmenorrhoea	Pulsatilla 1M/1dose
8	14/12/2019	No history of pain, thirst moderate, menses normal, not painful.	placebo
9	12/1/2020	No history of pain, thirst moderate, menses normal, not painful.	Placebo
10	9/2/2020	Pain in upper abdomen after taking meat and chicken puffs.	Pulsatilla 1M/1dose
11	8/3/2020	No history of pain, menses normal.	Placebo
12	10/5/2020	No history of pain, menses normal.	Placebo
13	12/7/2020	Breathing difficulty started for 1 week	Pulsatilla 10M/1dose
14	13/9/2020	No history of dyspnoea or dysmenorrhoea or abdominal pain.	Placebo
15	8/11/2020	Menses regular, No history of dyspnoea, or dysmenorrhoea or abdominal pain.	Placebo
16	10/1/2021	Menses regular, No history of dyspnoea, dysmenorrhoea or abdominal pain.	Placebo
17	14/3/2021	No history of abdominal pain, no dyspnoea, no dysmenorrhoea.	Placebo

3. Results

There was significant improvement after the first prescription itself and pain in upper abdomen was completely relieved after ten months of treatment. No

history of abdominal pain after 9/2/2020 even after taking fatty food, fried items, potato or milk. Ultrasonography report on 16/4/2021 showed normal gallbladder distension with normal contour.



VAIKOM TALUK URBAN WELFARE-KISCO DIAGNOSTIC CENTRE

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Name :	Age : 17	Sex : Female
Ref by :		Date : 09.04.2019

USG ABDOMEN

LIVER	Normal in size(12.7cm) and normal parenchymal echopattern. No evidence of focal parenchymal lesion is seen. No evidence of intrahepatic biliary radicle or CBD dilatation is seen. Portal vein and hepatic veins are normal
GALL BLADDER	Wall appears thickened (8.2 mm) with obliteration of the lumen in some areas showing an hour glass appearance. Few cystic spaces noted in the wall. Echogenic foci with twinkling artifact also noted in the wall. No evidence of calculi.
PANCREAS	Visualized parts show normal size & normal parenchymal echotexture. No evidence of focal parenchymal lesion or pancreatic duct dilatation.
SPLEEN	Normal in size (8.4cm) and normal parenchymal echopattern.
KIDNEYS	Rt. Kidney measures 10.08x3.5cm Lt. Kidney measures 9.1x4.2cm Both Kidneys normal in size, outline, echotexture, shape and position. No evidence of hydronephrosis or focal parenchymal lesion.
PARAAORTIC REGION	Free. No evidence of free intraperitoneal fluid.
URINARY BLADDER	Fully distended. Wall thickness normal. No evidence of calculi/ mass lesion
UTERUS	Retroverted measures 8.2x4x3 cm. No focal lesion is seen. Endometrium mm thick.
OVARIES	Right ovary measures 3.06x1.1cm Left ovary measures 4.4x1.6cm, shows a dominant follicles measuring 1.8x1.2cm Ovaries appear normal.
ADNEXAE	No adnexal mass seen.

IMPRESSION

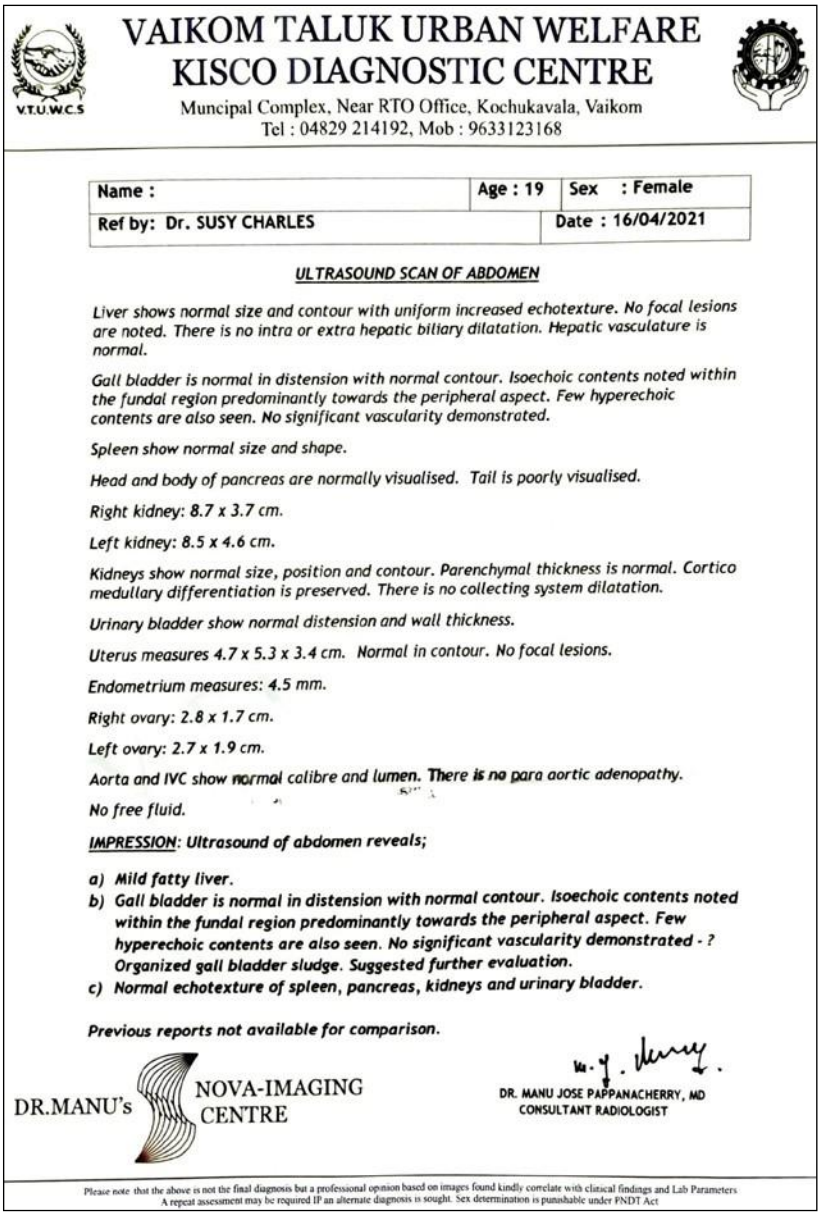
1. **Gall bladder shows diffuse wall thickening (8.2 mm) with obliteration of the lumen in some areas showing an hour glass appearance. Some cystic spaces and echogenic areas noted in the wall.** Features are consistent with **adenomyomatosis.**
2. **Other visualized abdominal and pelvic organs are within normal limits.**

Thank you for reference

Dr. Alphonsa Kalliath, MBBS,MD,RD

Please note that the above is not the final diagnosis but a professional opinion based on images found. Kindly correlate with clinical findings and Lab parameters. A repeat assessment may be required IP an alternate diagnosis is sought. Sex determination is punishable under PNDT Act.

Fig 2: Ultrasound Report (2019) before starting Homoeopathic treatment



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Name :	Age : 19	Sex : Female
Ref by: Dr. SUSY CHARLES		Date : 16/04/2021

ULTRASOUND SCAN OF ABDOMEN

Liver shows normal size and contour with uniform increased echotexture. No focal lesions are noted. There is no intra or extra hepatic biliary dilatation. Hepatic vasculature is normal.

Gall bladder is normal in distension with normal contour. Isoechoic contents noted within the fundal region predominantly towards the peripheral aspect. Few hyperechoic contents are also seen. No significant vascularity demonstrated.

Spleen show normal size and shape.

Head and body of pancreas are normally visualised. Tail is poorly visualised.

Right kidney: 8.7 x 3.7 cm.

Left kidney: 8.5 x 4.6 cm.

Kidneys show normal size, position and contour. Parenchymal thickness is normal. Cortico medullary differentiation is preserved. There is no collecting system dilatation.

Urinary bladder show normal distension and wall thickness.

Uterus measures 4.7 x 5.3 x 3.4 cm. Normal in contour. No focal lesions.

Endometrium measures: 4.5 mm.

Right ovary: 2.8 x 1.7 cm.

Left ovary: 2.7 x 1.9 cm.

Aorta and IVC show normal calibre and lumen. There is no para aortic adenopathy.

No free fluid.

IMPRESSION: Ultrasound of abdomen reveals;

a) Mild fatty liver.
b) Gall bladder is normal in distension with normal contour. Isoechoic contents noted within the fundal region predominantly towards the peripheral aspect. Few hyperechoic contents are also seen. No significant vascularity demonstrated - ? Organized gall bladder sludge. Suggested further evaluation.
c) Normal echotexture of spleen, pancreas, kidneys and urinary bladder.

Previous reports not available for comparison.

DR.MANU's NOVA-IMAGING CENTRE

DR. MANU JOSE PAPPANACHERRY, MD
CONSULTANT RADIOLOGIST

Please note that the above is not the final diagnosis but a professional opinion based on images found kindly correlate with clinical findings and Lab Parameters
A repeat assessment may be required IF an alternate diagnosis is sought. Sex determination is punishable under PNDT Act

Fig 4: Ultrasound Report (2021) after Homoeopathic treatment

4. Discussion

Gallbladder adenomyomatosis (GA) is becoming more prevalent in clinical practice as a result of the increased utilization of ultrasound imaging. Clinicians must be aware of the repercussions of this condition and its appropriate management [6]. In healthy individuals, the gallbladder wall is less than 2 millimeters thick [13]. The gallbladder wall is composed of four layers: serosa, muscularis propria, lamina propria, and mucosa. The mucosa and muscularis propria are both involved in the thickening of the wall in GA [14]. GA is a proliferative and degenerative disease that is distinguished by hypertrophy of the muscularis propria and excessive epithelial proliferation.Albridge et al. and Nishimura et al. [18] were the first to report GA as a precancerous condition. The DNA in the mucosa of GA is comparable to that of normal mucosa, and GA does not contain any oncogenes [4].

The case in question was diffuse type GA, a rarer form of the disease than fundal and segmental. The gallbladder exhibited a diffuse wall enlargement of 8.2mm, with the lumen obliterated, indicating a "hourglass appearance." The gallbladder returned to its normal distension and contour after undergoing constitutional treatment with Pulsatilla 200, followed by high potencies. Pulsatilla, a constitutional medicine, alleviated dysmenorrhoea, bronchial asthma (a childhood complaint), and abdominal discomfort. The homoeopathic physician should always be guided by the totality of symptoms in each case, according to Dr. Hahnemann. He should never develop the habit of producing his preferred medications for diseases that are nosologically identified. The mode of application of a remedy is what determines its homoeopathic nature, rather than its unique method of preparation [20, 21]. This is based on the principle of symptom similarity between the medication disease and the natural disease.

5. Conclusion

Here a case of gallbladder adenomyomatosis was treated with the homeopathic remedy Pulsatilla. Pulsatilla was selected as the constitutional medicine on the basis of totality of symptoms after repertorisation. Recurrent attack of abdominal pain was relieved completely and ultrasound scan after treatment showed normal gallbladder contour. The successful management of the case proves the effectiveness of homoeopathic constitutional treatment ingallbladder adenomyomatosis.

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