

# Herpes Zoster in Cholelithiasis Patient – Surgeons' Dilemma

## ABSTRACT

Herpes zoster often causes diagnostic difficulties. We report two cases of herpes zoster presented in our surgery outpatient department as pain abdomen. One patient was in acute eruptive phase and another was in pre-eruptive phase. In both patients routine blood test was normal and ultrasound of abdomen detected multiple cholelithiasis. Laparoscopic cholecystectomy was safely performed in both patients. Antiviral medication was prescribed after consultation with physician. A close follow-up and good communication between referring physician and surgeon are essential to manage such cases.

**KEYWORDS** herpes zoster, cholelithiasis, laparoscopic cholecystectomy

## INTRODUCTION

Herpes zoster is a medical condition caused by varicella-zoster virus. The clinical manifestations of herpes zoster are divided into the pre-eruptive phase (pre-herpetic neuralgia), acute eruptive phase, and chronic phase (post-herpetic neuralgia)<sup>1</sup>. As many as 80% of patients with herpes zoster experience burning, itching or paraesthesia localized to a dermatomal distribution. These symptoms usually last for several days but occasionally can last for longer than a week before the cutaneous eruption appears<sup>2</sup>. The burning pain prior to the characteristic eruptions may present a diagnostic dilemma because it can simulate any number of painful conditions, including migraine headache, cholecystitis, hepatitis, renal colic, appendicitis, pleurisy, pulmonary embolism, or myocardial ischemia<sup>3</sup>. We report two cases of herpes zoster presented in our surgery outpatient department as pain abdomen. Written informed consent was taken from each patient for this case report.

## CASE REPORT

**Case 1:** 70-year-old lady who was being treated for herpes zoster (acute eruptive phase, Fig. 1) since last 10 days was referred to surgery outpatient department by her physician for persistent right upper abdominal pain. Ultrasound of whole abdomen detected multiple cholelithiasis and after checking baseline investigations laparoscopic cholecystectomy was done. Histopathology of gallbladder revealed presence of chronic cholecystitis. Her pain gradually subsided after laparoscopic cholecystectomy.

**Case 2:** 84-year-old lady presented to emergency with right upper quadrant pain. Ultrasound of whole abdomen detected multiple cholelithiasis. She underwent laparoscopic cholecystectomy and discharged on the second postoperative day. Even after the operation her pain was persistent and on 5<sup>th</sup> post operative day cutaneous eruption of herpes zoster infection appeared bilaterally over lower part of chest and flank (Fig. 2).

Routine blood examination including liver function test was normal in both cases (Table 1). Histopathology of gallbladder suggested chronic cholecystitis in both cases. Both of the patients had no surgical morbidity. Antiviral medication was prescribed after consultation with physician.

## DISCUSSION

Herpes zoster often causes diagnostic difficulties. Bogomolov BP et al<sup>4</sup>. analysed the clinical and laboratory findings in 170 patients with herpes zoster and of these, 21 patients (12.3%) had been erroneously diagnosed before the

ISSN No	2230-7885
CODEN	JPBSC
NLM Title	J Pharm Biomed Sci
DOI	<a href="http://dx.doi.org/10.20936/jpbms/160279">http://dx.doi.org/10.20936/jpbms/160279</a>

Indrajit Rana<sup>1\*</sup>,  
Jugindra Sorokhaibam<sup>2</sup>,  
Chandragupta Chongtham<sup>3</sup>

<sup>1</sup>DNB General Surgery Resident, Department of General & Minimal Access Surgery, Shija Hospitals & Research Institute, Imphal, Manipur, India

<sup>2</sup>Senior Consultant, Department of General & Minimal Access Surgery, Shija Hospitals & Research Institute, Imphal, Manipur, India

<sup>3</sup>Consultant, Department of General & Minimal Access Surgery, Shija Hospitals & Research Institute, Imphal, Manipur, India

■ Address reprint requests to:

\*Dr. Indrajit Rana, Department of General & Minimal Access Surgery, Shija Hospitals & Research Institute, Imphal - 795004, Manipur, India  
Email: dr.indrajitrana@gmail.com

■ Article citation: Rana I, Sorokhaibam J, Chongtham C. Herpes zoster in cholelithiasis patient – surgeons' dilemma. *J Pharm Biomed Sci* 2016;06(08):495–497.

Available at [www.jpbums.info](http://www.jpbums.info)

**Statement of originality of work:** The manuscript has been read and approved by all the authors, the requirements for authorship have been met, and that each author believes that the manuscript represents honest and original work.

**Source of funding:** None.

**Competing interest/Conflict of interest:** The author(s) have no competing interests for financial support, publication of this research, patents and royalties through this collaborative research. All authors were equally involved in discussed research work. There is no financial conflict with the subject matter discussed in the manuscript.

**Disclaimer:** Any views expressed in this paper are those of the authors and do not reflect the official policy or position of the Department of Defense.



Fig. 1 Abdomen of case 1 (Eruptive phase during operation).



Fig. 2 Abdomen of case 2 (Eruptive phase during follow-up).

Table 1 Blood parameters during anesthesia checkup for cholecystectomy.

Blood parameter	Case 1	Case 2
Haemoglobin (gm/dl)	11.3	11.8
Total leukocyte count (thou/cumm)	4.82	9.01
Platelet count (thou/cumm)	155	209
ESR (mm 1 <sup>st</sup> hr)	33	19
Total bilirubin (mg/dl)	0.8	0.5
AST (IU/L)	42	26
ALT (IU/L)	39	24
Gamma GPT (U/L)	25	25
Alkaline phosphatase (U/L)	120	95
Albumin (gm/dl)	3.6	4.4

appearance of herpetic eruption as having other diseases (erysipelas, renal colic, acute pancreatitis, acute abdomen, and so forth). The most common predisposing factor for herpes zoster is age and it is common after 50 years<sup>2</sup>. In both of our case, patients were more than 50 years old. Herpes zoster can be associated with cholestatic hepatitis and raised liver enzymes<sup>5</sup>. But in our patients both of the patients had liver enzymes within normal limit. Rapid diagnosis is necessary for the optimal efficacy of antiviral therapy, but diagnosis in the early stage of infection is often difficult. Direct immunofluorescence assay<sup>6</sup> and detection of viral DNA using the polymerase chain reaction (PCR)<sup>7</sup> can diagnose herpes zoster before blister eruption. Though the presence of a dermatomal vesicular rash was considered as a contraindication to open surgical intervention earlier<sup>8</sup> from our experience laparoscopic cholecystectomy can be safely performed in such patients.

## CONCLUSION

Herpes zoster must be considered as a differential diagnosis of acute right upper quadrant pain even in the absence of vesicular rash especially in old patients. Routine blood tests can be normal and more specific investigations like direct immunofluorescence assay or PCR test of viral DNA can be advised for earlier detection of herpes zoster in suspected cases. Laparoscopic cholecystectomy can be safely performed in patients with herpes zoster even during the acute eruptive phase. A close follow-up and good communication between referring physician and surgeon are essential to manage such cases.

## REFERENCES

1. Gnann JW, Whitley RJ. Clinical practice. Herpes zoster. *N Engl J Med.* 2002;347(5):340–346.
2. Glaser RB. Clinical aspects of herpes zoster (Topics in Primary Care Medicine). *West J Med.* 1983;139:718–720.
3. Reuler JB, Chang MK. Herpes zoster: epidemiology, clinical features, and management. *South Med J.* 1984;77(9):1149–56.

4. Bogomolov BP, Bakhur EG. Diagnostic difficulties in herpes zoster. *Ter Arkh.* 1984;56(8):138–40.
5. Gomes MM, Antunes H, Lobo AL, Branca F, Correia-Pinto J, Moreira-Pinto J. Acute alithiasic cholecystitis and human herpes virus type-6 infection: first case. *Case Rep Pediatr.* 2016;2016:9130673.
6. Dahl H, Marcoccia J, Linde A. Antigen detection: the method of choice in comparison with virus isolation and serology for laboratory diagnosis of herpes zoster in human immunodeficiency virus-infected patient. *J Clin Microbiol.* 1997;35:347–349.
7. Lillie HM, Wassilew SW, Wolff MH. Early diagnosis of herpes zoster by polymerase chain reaction. *J Eur Acad Dermatol Venereol.* 2002;16(1):53–7.
8. Hassan I, Donohue JH. Herpes zoster mistaken for biliary colic and treated by laparoscopic cholecystectomy: a cautionary case report. *Surg Endosc.* 1996;10(8):848–9.