ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 9, Issue, 07, pp.53580-53581, July, 2017

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

CASE STUDY

FISH CONSUMPTION LEADING TO MULTIORGAN FAILURE

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ARTICLE INFO

Article History:
Received 16th April, 2017
Received in revised form
21st May, 2017
Accepted 10th June, 2017
Published online 22nd July, 2017

Key words:

Rohu fish, Acute renal failure,
Liver failure, Multiorgan dysfunction.

ABSTRACT

Consumption of Rohu fish (Labeorohita) is very common in India especially in North East parts, in North Bihar. People have belief that eating of gallbladder of raw Rohu fish helps in cure of joint pain, asthma and also blood sugar. But this may cause, renal failure, liver failure or multiorgan dysfunction and this misconception may cost their lives.

Citation: Dr. Amit Kumar, Dr. V. N. Jha and Dr. Nimisha, 2017. "Fish consumption leading to Multiorgan failure", *International Journal of Current Research*, 9, (07), 53580-53581.

INTRODUCTION

Consumption of Fish gallbladder for some medical purpose is a common practice in Southeast Asia especially in north eastern India. People are in belief that fish gallbladder of grasscarp helps in digestion, improves vision, cures joint pain, and cures asthma. (Cheng *et al*., 1991) We are presenting a series of cases who have taken raw gallbladder of rohu fish for various medical problems.

Case series

Table 1.

	Case 1	Case 2	Case 3
Age (years)	56	48	50
Sex	Female	Male	female
Consumption of	Yes	Yes	Yes
Gall bladder of Rohu	Acute renal failure	acute liver failure and multi organ dysfunction	Acute renal failure
Complication		conservative on line of	
	Hemodialysis	hepatitis	Hemodialysis
Treatment		and hepatic encephalopathy and	
Recovery	Fully recovered	hemodialysis	Full recovery
Reason for	May cure	fully recovered	May cure
intake	asthma	may cure asthma	diabetes

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DISCUSSION

Following old tradition, fish gallbladder is being used as medicine to treat and more specifically to cure various medical problems like asthma, joint pain, raised blood sugar in southeast parts of India. However it can lead to acute renal failure and acute liver injury as reported in cases of fish poisoning from India, (Sahoo *et al*., 1995) Japan (Yamamoto *et al*., 1988). Toxicity is attributed to the Fishes belonging to the family Cyprinidae. The family includes grass carp (C idellus), common carp, and silver carp (Nico, 1999). Amongst these, fish of the grass carp variety has been commonly reported for its toxicity. Rohu (Labetorohita) theIndian fish carp is commonly consumed in northeastern and eastern region of India. The ichthyotoxic effects of fish gall bladder is attributed to the presence of a toxin, sodium cyprinol sulfate which is a C27 bile acid. (Hwang *et al*., 2000) The toxin is heat stable and insoluble in alcohol as cases are reported even after consumption of cooked bile. (Yip *et al*., 1981) Toxicity is directly proportionalto the size and quantity of gall bladder or bile consumed. (Xuan *et al*., 2003) After ingestion most patients complain of abdominal pain, nausea, vomiting tendency, sometimes loose motion followed by features of oliguria and renal failure one to two days later; acute hepatic failure three to five days later and feature of multiorgan dysfunction Acute renal failure after fish gallbladder ingestion has an excellent prognosis. However, death from fulminant hepatic failure can occur. Recently, studies have shown that fish gall bladder can also damage the heart, liver, gastro-

intestinal tract and lead to multiple organ dysfunction syndrome (MODS) in addition to acute renal failure. (Tao *et al*., 1990) Treatment comprises of hemodialysis and supportive management.

REFERENCES

American Journal of Kidney Diseases Volume 41, Issue 1, January 2003, Pages 220–224

Cheng XL, Wang ZI, Reng LM. 1991. Fish gall bladder poisoning damage liver, renal and heart. *Chin J Intern Med*.; 3:238–9.

Hwang DF, Yeh YH, Lai YS, Deng JF. 2000. Identification of cyprinol and cyprinol sulfate from grass carp bile and their toxic effects in rats. *Toxicon*., 39:411-4

Nico L, 1999. Nonindigenous aquatic species. United States Geographical Survey.

Sahoo RN, Mohapatra MK, Sahoo B, Das GC. 1995. Acute renal failure associated with freshwater fish toxin. *Trop Geogr Med*., 47:95-5

Tao FW, Liao FT, Xu YZ, 1990. A case of fish gall bladder poisoning leading to MODS. *Chin J Intern Med*.; 29:119–20.

Xuan BH, Thi TX, Nguyen ST, Goldfarb DS, Stokes MB, Rabenou RA, 2003. Ichthyotoxic ARF after fish gallbladder ingestion: A large case series from Vietnam. *Am J Kidney Dis*; 41:220-4

Yamamoto Y, Wakisaka O, Fujimoto S, Kaseda N, Maehara T, Aso K, *et al.* 1988. Acute renal failure, caused by ingestion of carp gall bladder: A case report of 13 cases in Japan. *Nippon NaikaGakkatZasshib*., 77:1268-73

Yip LL, Chow CL, Yung KH, Chu KW. 1981. Toxic material from the gallbladder of the grass carp (Ctenopharyngodonidellus). *Toxicon*, 19:567-9.

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