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# Orlistat-Associated Adverse Effects and Drug Interactions

A Critical Review

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Table I. Reported o	rlistat-associated adverse effects
Body system	Adverse effects
Gastrointestinal system	Fatty/oily stool, faecal urgency, diarrhoea, flatulence, abdominal pain, faecal spotting, anal fissure, cholelithiasis, pancreatitis, acute cholestatic hepatitis, subacute liver failure, massive hepatocellular necrosis, severe hepatic injury
Blood pressure	Hypertension (17 cases)
Nervous system	Depression, malaise, lassitude, headache, forgetfulness
Renal function	Enteric hyperoxaluria, acute kidney injury secondary to acute oxalate nephropathy, rapidly progressive renal failure, constipation, polyuria, polydipsia, lower-leg oedema
Endocrine system	Diabetic ketoacidosis
Skin	Cutaneous vasculitis, lichenoid eruption
Genitalia	Vaginitis, vulvitis

### Table II. Drug-drug interactions with orlistat

## Drugs reported to interfere with orlistat

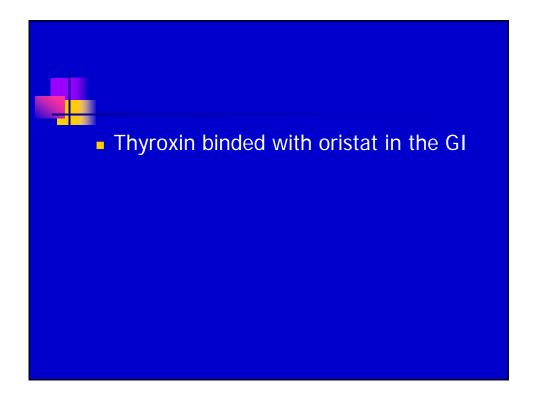
Fat-soluble vitamins, warfarin, amiodarone, ciclosporin, lamotrigine, valproic acid, vigabatrin, gabapentin, thyroxine

### Drugs not (reported as) interfering with orlistat

Phenytoin, fluoxetine, amitriptyline, metformin, phentermine, sibutramine, digoxin, losartan, atenolol, furosemide, captopril, nifedipine, pravastatin, simvastatin, atorvastatin, haloperidol, clozapine, clomipramine, desipramine, carbamazepine



- vitamin A, D, E and betacarotene |
- vitamin K absorption \ \diamondaria and lowering of warfarin dose
- Amiodarone is an lipophilic drug
- Lamotrigine, valproic acid, vogabatrin, gabapentin are lipophilic drugs



JOP. J Pancreas (Online) 2010 Jan 8; 11(1):61-63.

#### CASE REPORT

#### Acute Pancreatitis Following Orlistat Therapy: Report of Two Cases

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# Case report #1

- 73 years old lady
- Upper abdominal pain about 12 hrs
- Omeprazole, fluoxetine
- Orlistat for 10 days
- BP 178/86 mmHg, HR 68 bpm

·	Case#1	Case#2	Reference range
Amylase (IU/L)	1,070	371	0-100
Urea (mmol/L)	5.1	3.8	2.5-7.5
Creatinine ( $\mu mol/L$ )	51	60	60-100
Adjusted calcium (mmol/L)	2.04	2.12	2.1-2.6
$Bilirubin  (\mu mol/L)$	10	12	0-22
Albumin (g/L)	39	45	36-52
AST (IU/L)	94	78	0-40
ALT (IU/L)	101	58	0-50
Alkaline phosphatases (IU/L)	113	58	25-110
C reactive protein (mg/L)	<6	10	0-6
Glucose (mmol/L)	7.5	5.9	3.5-5.5
Arterial H <sup>+</sup> (nmol/L)	42	32	36-43
White cell count (x109/L)	15.8	11.9	4-11



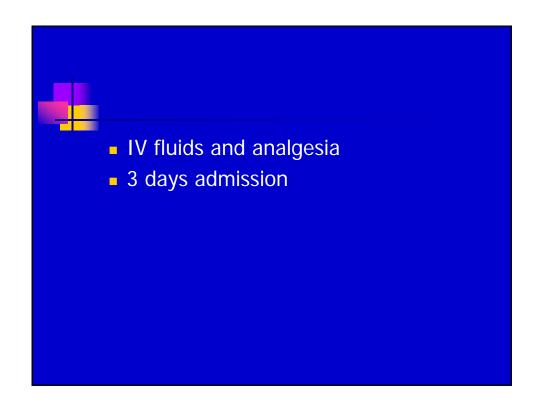


## Case report #2

- 45 years old lady
- 6 hours central abdominal pain
- Venlafaxine (Effexor), levomepromazine (Nozinan)
- Alcohol induced pancreatitis 1 year ago
- Orlistat for 2 days
- BP 148/63 mmHg, HR 80 bpm



Table 1. Laboratory data.					
	Case#1	Case#2	Reference		
			range		
Amylase (IU/L)	1,070	(371)	0-100		
Urea (mmol/L)	5.1	3.8	2.5-7.5		
Creatinine (µmol/L)	51	60	60-100		
Adjusted calcium (mmol/L)	2.04	2.12	2.1-2.6		
Bilirubin (µmol/L)	10	12	0-22		
Albumin (g/L)	39	45	36-52		
AST (IU/L)	94	78	0-40		
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Alkaline phosphatases (IU/L)	113	58	25-110		
C reactive protein (mg/L)	<6	10	0-6		
Glucose (mmol/L)	7.5	5.9	3.5-5.5		
Arterial H <sup>+</sup> (nmol/L)	42	32	36-43		
White cell count (x10 <sup>9</sup> /L)	15.8	11.9	4-11		



# Conclusion

- Pharmacists should remind patients to the <u>drug interaction</u> with orlistat
- If patients had <u>abdominal pain</u> after commencing orlistat, it may be pancreatitis.
- Pharmacists must note cautious use of orlistat in patients at risk of <u>pancreatic</u> <u>injury</u>

