

Table 1 Demographic characteristics of HIV-seropositive and seronegative individuals

non-IVDU (n=106)						IVDU (n=29)				
HIV+ (n=43)			HIV- (n=63)			HIV+ (n=13)			HIV- (n=16)	
	A	B	C	a	b	A	B	C	a	b
men	2	7	22	12	8	4	7	1	5	8
women	6	3	3	12	31	1	0	0	1	2
age range	22-42	26-59	26-50	19-63	22-54	18-39	25-40	22	20-42	21-39
mean age	30.88	38.70	32.16	36.29	25.92	26.40	32.29	22	31.50	28.40
S.D.	6.85	10.50	6.29	11.30	6.97	7.96	4.75	-	7.97	6.95

A= asymptomatic group

B= symptomatic group

C= AIDS group

a= with disease

b= without known disease

Table 2 Grouping of HIV and HIV free subjects according to total lymphocyte cell counts  
(cell/mm<sup>3</sup>)

non-IVDU (n=106)						IVDU (n=29)				
HIV+ (n=43)			HIV- (n=63)			HIV+ (n=13)			HIV- (n=16)	
Total lymphocytes per mm <sup>3</sup>	A	B	C	a	b	A	B	C	a	b
>2000	2	0	1	10	17	3	5	0	5	6
1000-2000	5	5	6	7	19	1	1	0	0	0
<1000	1	5	18	7	3	1	1	1	1	4

A= asymptomatic group

B= symptomatic group

C= AIDS group

a= with disease

b= without known disease

Table 3 Groups of medications used among the patients

## I. Xerostomia-Inducing Drugs by Product Category (Class of Drug)

PRODUCT CATEGORY (CLASS)	PRODUCT NAME	GENERIC NAME	MEDICAL USE
Analgesics (n= 33)	Methadone Tramal	Methadone Tramadol HCL	- analgesics - acute or chronic pain
Psychotherapeutic agent, other (n= 17)	Diazepam Tranxene	Diazepam Dipotassium clorazepate	- anxiety, tension - anxiety
Antidepressant (n= 14)	Nortriptyline Ativan  Amitriptyline	Nortriptyline Lorazepam  Amitriptyline HCL	- anxiety, tension - anxiety, pre-surgical medication - depressive symptom
Antihypertensive (n= 4) - Diuretics	Aldomet Lasix Catapres Minipress	Methyldopa Furosemide Clonidine HCL Prazosin HCL	- hypertension - diuretic, cardiac oedem - hypertension - hypertension
Antihistamine (n= 17) - H <sub>1</sub> -receptor antagonist  - H <sub>2</sub> -receptor antagonist	Benadryl Piriton Cimetidin Ranitidine	Diphenhydramine HCL Chlorpheniramine maleate Cimetidine Ranitidine	- allergic disorder - allergic conditions - duodenal, gastric ulcers - duodenal, gastric ulcers
Antinauseant (n= 3)	Atarax	Hydroxazine HCL	- allergic conditions
Antidiarrheal (n= 1)	Imodium Colistin	Loperamide HCL Colistin sulfate	- diarrhea - chronic diarrhea
Antihyperlipemic & Cholesterol reducer (n= 1)	Lopid	Gemfibrozil	- dyslipidemia
Antispasmodics (n= 2)	Buscopan	Hyoscine-N-butylbromide	- GI tract spasm, peptic u
Cough & Cold Remedies (n= 5)	Dextromethorphan Actifed  Chlorpheniramine Tussils	Dextromethorphan HBr Combination  Combination Combination	- cough - allergic rhinitis, nasal congestion - cough - cough
Muscle relaxant (n= 1)	Orphenadrine citrate	Orphenadrine citrate	- painful muscular condit
Cardiac drugs (n= 1)	Nifedipine Adalat	Nifedipine Nifedipine	- angina pectoris - hypertension
Antiviral (n= 3)	Videx	Didanosine	- HIV infection

## II. Other drug groups that have not been identified as a xerostomia-inducing agents

PRODUCT CATEGORY (CLASS)	PRODUCT NAME	GENERIC NAME	MEDICAL US
Antifungal drugs (n= 21)	Itraconazole Amphotericin B Ketoconazole Clotrimazole Fluconazole Nystatin Griscofulvin	Itraconazole Amphotericin B Ketoconazole Clotrimazole Fluconazole Nystatin Griscofulvin	- fungal infection - fungal infection - fungal infection - fungal infection - fungal infection - fungal infection - fungal infection
Antibacterial drugs (n= 24)	Bactrim Diclocil Gentamycin  Cloxacillin  Klacid Isoniazid Rifampicin Ethambutol Cefuroxime  Amikin  Norfloxacin Metronidazole Ampicillin  Pyrazinamide Sulfadiazine Amoxycillin  Dicloxacillin	Combination Dicloxacillin Na Gentamycin sulfate  Cloxacillin Na  Clarithromycin Isoniazid Rifampicin Ethambutol Cefuroxime  Amikacin sulfate  Norfloxacin Metronidazole Ampicillin  Pyrazinamide Sulfadiazine Amoxycillin  Dicloxacillin Na	- infection of resp tract - infection of resp tract - infection of resp tract GIT - infection caused by susceptible organism - infection of resp tract - TB - TB - TB - infection of resp tract GUT - UTI, bacteremia & septicemia - bacterial infection - anaerobic infection - infection of UTI, res GIT - TB - infection of resp tract - infection of reape tract ENT, GIT - infection of resp tract
Antiviral drugs (n= 6)	AZT DDC	Zidovudine Zalcitabine	- HIV infection - HIV infection
Analgesics & Antipyretics (n= 27)	Paracetamol Baby acetylsalicylic acid	Paracetamol Baby aspirin	- analgesic, antipyretic - analgesic, antipyretic
Anthelmintics (n= 2)	Mebendazole	Mebendazole	- treatment of worm
Antirheumatics & Antiinflammatory Analgesics (n= 6)	Naproxen  Diclofinac Indocid Mebron Voltaren Brufen	Naproxen  Diclofinac Na Indomethacin Mepirizole Diclofinac Na Ibuprofen	- antirheumatic  - rheumatism - rheumatoid arthritis - rheumatoid arthritis - rheumatism - rheumatoid arthritis

II. Other drug groups that have not been identified as a xerostomia-inducing agents (Cont.)

PRODUCT CATEGORY (CLASS)	PRODUCT NAME	GENERIC NAME	MEDICAL U
Antiemetics & Antivertigo drug (n= 6)	Motilium Merislon	Domperidone Betahistine mesylate	- dyspepsia, vomiti - vertigo & dizziness
GIT Regulators, Antiflactulents (n= 2)	Plasil	Metoclopramide	- nausea & vomitin
Anticonvulsants (n= 2)	Dilantin	Phenytoin	- epilepsy
Hyperuricaemia, Gout (n=3)	Allopurinol Probenecid	Allopurinol Probenecid	- gout, hyperuricae - gout
Antineoplastic (n=2)	Endoxan	Cyclophosphamide	- chemotherapy of malignant tumours
Antimalarial drugs (n= 1)	Daraprim	Pyrimethamine	- malaria
Steroid (n= 12)	Prednisolone	Prednisolone	- anti-inflammatory
Corticosteroid hormone (n= 1)	Dexamethazone	Dexamethazone	- anti-inflammatory immunosuppressiv effects
Anaesthetics (n= 2)	Xylocaine	Lignocaine HCL	- draining, probing cystoscopy

**Table 4** Number of patients in different level of unstimulated and stimulated saliva flow rate (ml/min)

non-IVDU (n= 106 )						IVDU (n= 29)				
HIV+ (n=43)			HIV- (n= 63)			HIV+ (n=13)			HIV- (n=16)	
Saliva flow rate (ml/min)	A	B	C	a	b	A	B	C	a	b
<b>Unstimulated</b>										
0-0.1	0	4	11	8	3	3	3	1	3	5
0.1-0.17	2	1	4	3	7	0	3	0	2	2
>0.17	6	5	10	13	29	2	1	0	1	3
<b>Stimulated</b>										
0-0.5	0	2	2	2	2	1	2	0	1	0
0.5-0.7	0	1	2	1	2	0	0	0	0	2
>0.7	8	7	21	21	35	4	5	1	5	8

A= asymptomatic group

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C= AIDS group

a= with disease

b= without known disease

Table 5 Means and standard deviations of unstimulated and stimulated saliva flow rate (ml/min) among the subgroups

non-IVDU (n= 106)						IVDU (n= 29)				
HIV+ (n=43)			HIV- (n= 63)			HIV+ (n=13)			HIV- (n=16)	
Mean flow rate (ml/min)	A	B	C	a	b	A	B	C	a	b
Unstimulated	0.41	0.15	0.17	0.25	0.47	0.19	0.09	0.10	0.16	0.13
Stimulated	1.59	1.43	1.43	1.51	1.61	1.76	1.26	0.83	1.86	1.74
S.D.										
Unstimulated	0.24	0.10	0.17	0.24	0.40	0.26	0.08	-	0.18	0.12
Stimulated	1.08	0.96	0.72	0.95	0.88	1.29	0.76	-	1.05	1.38

A= asymptomatic group

B= symptomatic group

C= AIDS group

a= with disease

b= without known disease

Table 6 Relationship of unstimulated and stimulated saliva flow rate

Unstimulated flow rates (ml/min)	N	Stimulated flow rates (ml/min)		
		0-0.5	0.5-0.7	> 0.7
0-0.1	41	6	4	31
0.1-0.17	24	3	1	20
>0.17	70	3	3	64



Table 7 Factors associated with hyposalivation and feeling of dry mouth

Variable	Category	Patients with hyposalivation		p-value
		n	%	
Age	≤ 32 yr	39	61.9	0.059
	> 32 yr	24	38.1	
Sex	male	42	66.7	0.508
	female	21	33.3	
HIV	seropositive	31	49.2	0.900
	seronegative	32	50.8	
Stage	asymptomatic	11	35.5	0.030
	symptomatic	16	51.6	
	AIDS	4	12.9	
Risk	heterosexual	42	66.7	0.008
	IVDU	21	33.3	
Lymphocyte (cell/mm <sup>3</sup> )	>2000	23	36.5	0.264
	1000-2000	15	23.8	
	<1000	25	39.7	
Systemic disease	No disease	17	73.0	0.001
	With disease	46	27.0	
Smoking	non-smoker	28	44.4	0.002
	smoker	27	42.9	
	previous smoker	8	12.7	
Alcohol	teetotaler	34	54.8	0.001
	alcohol drinker	20	32.3	
	previous drinker	8	20.59	
Weight loss	presence	32	49.2	0.900
	absence	31	50.8	

**Table 8 Associations between hyposalivation, xerostomia and colony forming unit, presence of oral candidiasis, cervical caries, and number of existing teeth**

Variable	Categories	Hyposalivation			Xerostomia		
		Yes	No	p-value	Yes	No	p-value
Colony forming unit	> median	29	18	0.010	21	26	0.282
	< median	34	54		31	57	
Oral candidiasis	presence	15	9	0.101	11	13	0.405
	absence	48	61		40	69	
Cervical/ root caries	presence	15	14	0.557	12	17	0.573
	absence	46	55		36	65	
Number of existing teeth	> median	27	22	0.138	22	27	0.250
	< median	36	50		30	56	