

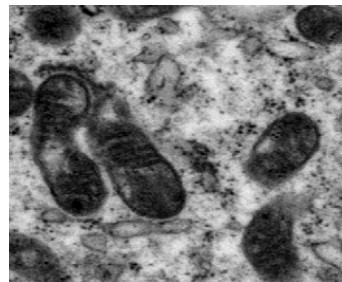
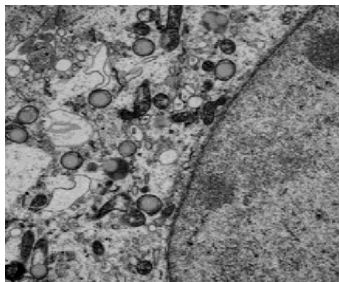
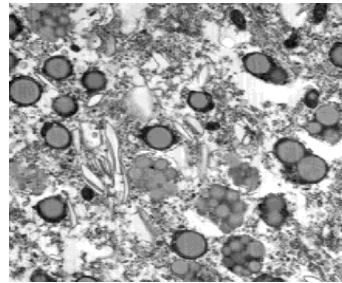
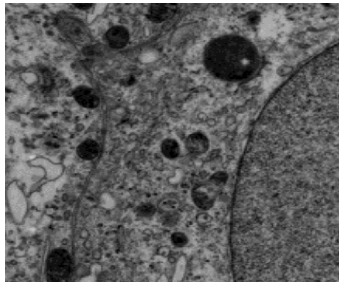


For Science Issue 4
Samuel Cohen

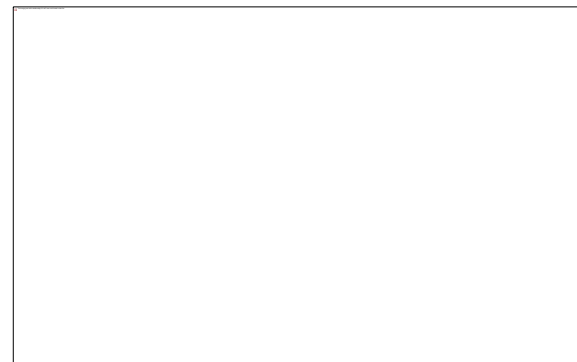
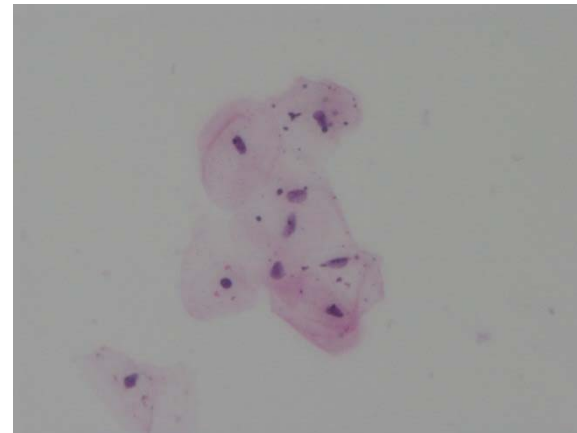
Mode of Action of Inorganic Arsenic

Intracytoplasmic Inclusions of Urothelium

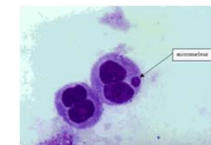
Mouse



Human



These inclusions were mistaken for micronuclei:



Reports of “Micronuclei” In Humans

Sl no.	Author, Year [Ref No.]	Sample Size N (Exposed; Unexposed)	Effect size [Exposed; vs. Unexposed; Mean (SE)]		
			Lymphocyte	Urothelial	Buccal
1	Warner et al., 1994. [23]	36 (18,18)	-	2.79 (0.73) vs. 1.57 (0.28)	-
2	Moore et al., 1996 [24]	36 (18,18)	-	2.8 (NA) vs. 1.67 (NA)	-
3	Dolout et al., 1996 [9]	44 (22; 22)	38 (3.2) vs 6.9 (1.7)		
4	Moore et al., 1997 [25]	125 (70; 55)	-	3.2 (NA) vs. 2.6 (NA)	-
5	Biggs et al., 1997 [26]	104 (83; 21)	-	3.34 (NA) vs. 1.61 (NA)	-
6	Gonsebatt et al., 1997 [7]	69 (35; 34)	-	2.23 (0.99) vs. 0.48 (0.10)	2.21 (0.47) vs. 0.58 (0.13)
7	Tian et al., 2001 [27]	32 (19; 13)	-	1.44 (0.37) vs. 0.53 (0.14)	2.21 (0.36) vs. 0.65 (0.21)
8	Basu et al., 2002 [22]	65 (45; 21)	6.39 (0.25) vs. 0.53 (0.07)	5.74 (0.27) vs. 0.56 (0.1)	5.15 (0.3) vs. 0.77 (0.11)
9	Basu et al., 2004 [15]	317 (163; 154)	9.34 (0.153) vs. 1.66 (0.061)	6.65 (0.13) vs. 1.41 (0.05)	5.94 (0.15) vs. 1.28 (0.05)
10	Martinez et al., 2004 [21]	217 (106; 111)	14.44 (0.99) vs. 11.96 (1.02)	-	-
11	Martinez et al., 2005 [28]	207 (105; 102)	-	-	3.14 (0.32) vs. 2.74 (0.26)
12	Chakraborty et al., 2006 [29]	70 (45; 25)	-	-	9.8 (0.7) vs. 2.9 (0.1)
13	Ghosh et al., 2006 [16]	306 (204; 102)	7.76 (0.17) vs. 2.03 (0.08)	5.13 (0.13) vs. 1.70 (0.07)	4.62 (0.15) vs. 1.67 (0.06)