Supplemental Table 3 References. Chemical Castration by Injection of Non-hormonal Chemicals into the Reproductive Tract and Potential Sterilizing Effects in Male Animals

Target Organ	Admin[1]	Chemical	Trade Name[3]	Species	Dosage	Original Use	Short-term Pathology	Long-term Pathology	Mechanisms of action	T Decreased[3]	Inflammation	Side-Effects	Refs[4]
Epididymis Vas deferens	Intra-lumen	Sclerosing agents[2]	N/A	Ram, Goat, Dog, Cat, Rat, Mouse, Monkey	Wide range	Numerous chemicals	Inflammation; epididymis swollen	Granulomas and cysts; tissue scarring; azoospermia	Spermatic granuloma; fibrosis; blockage	No	Yes	Adhesions between epididymis and tunica vaginalis; sometimes testicular effects	1
	Intra-lumen plugs	Silicone, polyurethane elastomers, hydrogels, co-polymers	RISUG® ADAM™ Vasalgel®	Rat, Rabbit, Monkey, Man	N/A	Elastomers; gels	Occlusion of vas deferens	Azoospermia; testis and epididymal pathology	Prevention of sperm transport; blockage	No	Yes	Testis focal degeneration; hematoma	2

[1] Administration of the chemical/drug by intra-organ lumenal injection (intra-epididymal, intra-vas deferens)
[2] Sclerosing agents consist of a broad range of caustic chemicals that induce tissue damage and elicit fibrosis: Quinacrine dihydrochloride, zinc arginate, sodium tetradecyl sulfate, potassium permanganate, ethanol +/-ascorbic acid, silver nitrate, formaldehyde, styrene maleic anhydride, chlorhexidine digluconate, lactic acid, methylcyanoacrylate, urea and ethanol, formaldehyde and ethanol, $CaCl_2$ in ethanol
[3] N/A, not applicable; T, testosterone
[4] Supplemental References:
1: Sclerosing Agents [1-10, 11l, 12-16]
2: Intra-lumen plugs [17-23]

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