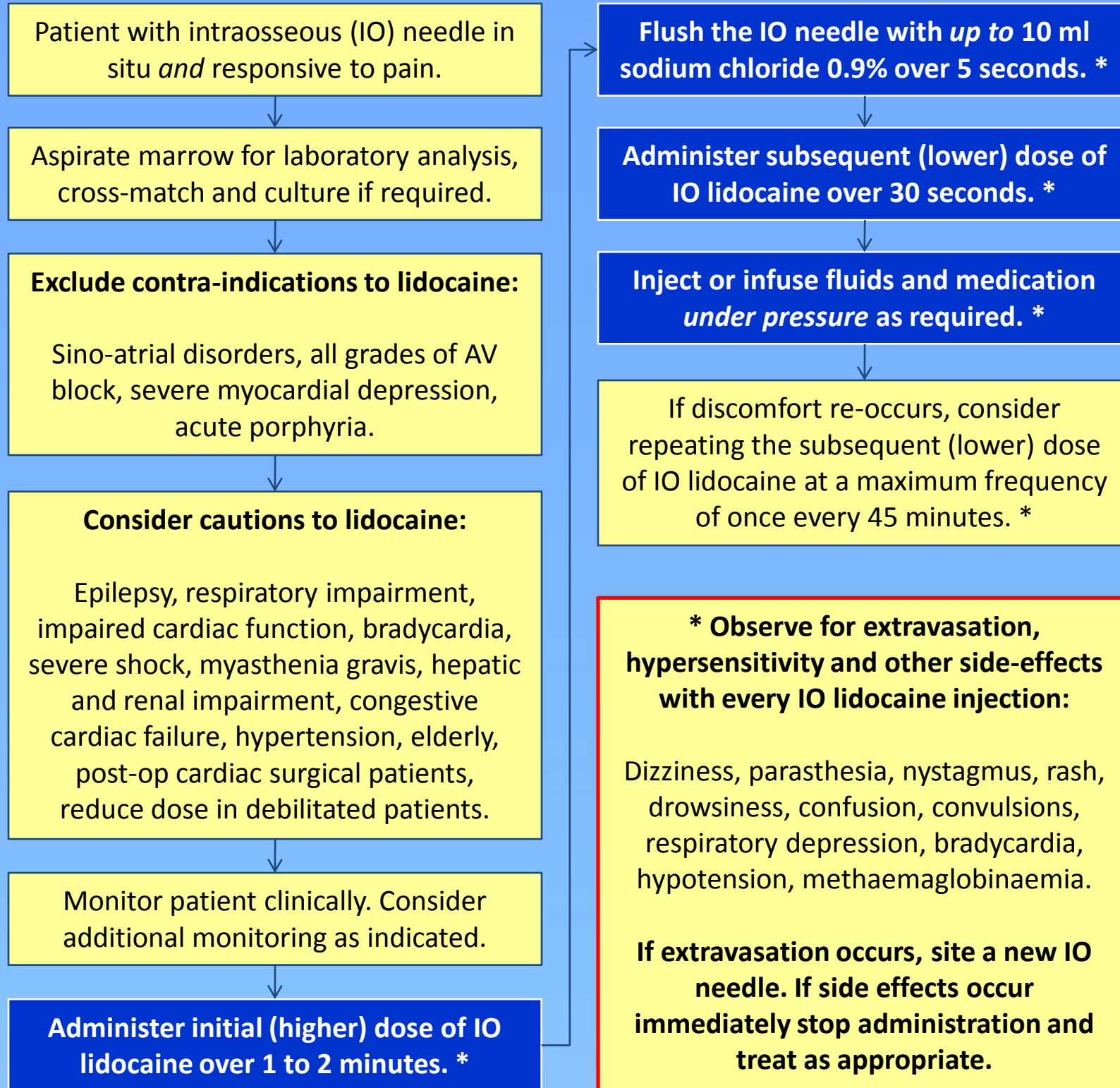


Intraosseous administration of preservative-free lidocaine

Read this guideline fully before use - if in doubt seek senior medical advice



Volume of preservative-free lidocaine – titrate IO to analgesic effect

Age	Weight (kg)	Volume of 2% (ml) 1 ml of 2% = 20 mg/ml		Volume of 1% (ml) 1 ml of 1% = 10 mg/ml	
		Initial	Subsequent	Initial	Subsequent
Neonate	3	0.07	0.03	0.15	0.07
Neonate	4	0.1	0.05	0.2	0.1
7 weeks	5	0.12	0.06	0.25	0.12
3 months	6	0.15	0.07	0.3	0.15
5 months	7	0.17	0.08	0.35	0.17
7 months	8	0.2	0.1	0.4	0.2
1 year	9	0.22	0.11	0.45	0.22
15 months	10	0.25	0.12	0.5	0.25
2 years	12	0.3	0.15	0.6	0.3
3 years	14	0.35	0.17	0.7	0.35
4 years	16	0.4	0.2	0.8	0.4
5 years	18	0.45	0.22	0.9	0.45
6 years	20	0.5	0.25	1	0.5
7 years	23	0.57	0.28	1.1	0.57
8 years	26	0.65	0.32	1.3	0.65
9 years	29	0.72	0.36	1.4	0.72
10 years	32	0.8	0.4	1.6	0.8
11 years	35	0.87	0.43	1.7	0.87
12 years	39	0.97	0.48	1.9	0.97
13 years	44	1.1	0.55	2.2	1.1
14 years	50	1.2	0.62	2.5	1.2
15 years	54	1.3	0.67	2.6	1.3
16 years	58	1.4	0.72	2.8	1.4
Adult	60	1.5	0.75	3	1.5
	70	1.7	0.87	3.4	1.7
	80+	2	1	4	2

The lower volumes of 2% lidocaine (<1 ml) may be difficult to accurately measure and use of, or dilution to, 1% lidocaine should be considered under these circumstances. Use the appropriate syringe size for the volume to administer to ensure maximum accuracy:

Volume	Syringe size
0 - 1 ml	1 ml
1 - 2.5 ml	2.5 ml
2.5 - 5 ml	5 ml

*** Observe for extravasation, hypersensitivity and other side-effects with every IO lidocaine injection:**

Dizziness, paraesthesia, nystagmus, rash, drowsiness, confusion, convulsions, respiratory depression, bradycardia, hypotension, methaemaglobinaemia.

If extravasation occurs, site a new IO needle. If side effects occur immediately stop administration and treat as appropriate.

*** The internal volume of the IO needle and extension set must be considered when calculating administration speed. Ensure the IO needle and other 'dead-space' has been totally cleared of lidocaine before flush, medication or fluids are commenced.**