PROCAINE HCL FOR INJECTION

Purpose:

- Local anesthetic of the ester family
- Sodium channel blocker, NMDA receptor blocker, nicotinic acetylcholine receptor antagonist, serotonin receptor antagonist
  https://go.drugbank.com/drugs/DB00721

Conditions Treated:

- Pain

Storage:

- Procaine USP 99% powder sho[redacted]d the certified expiry date up to 10[redacted]e quantity in smaller bottles of 100[redacted] present in each bottle. Allow bo[redacted] minutes before opening the bott[redacted] moisture to the procaine.
- Preservative-free 2% procaine solution should be stor[redacted]

Equipment Required:

- Pyrex beakers, va[redacted]
- Volumetric flasks [redacted] 100ml, 250ml.
- 10ml sterile syring[redacted]
- Magn[redacted]
- Digita[redacted]
- Lami[redacted]
- Stain[redacted]s, various sizes

Mixing Procedure:

1. All equipment that will come into contact with the medication must be sterilized (e.g. clean with 70% isopropyl alcohol or use autoclave).
2. Determine the volume of procaine 2% solution you want to prepare (see table below).
3. [redacted] to
4. [redacted]
5. [redacted]

6. If sodium [redacted] solution is being used, add the correct volume at this point (based on the table).
7. Stir to dissolve all the ingredients (manually or with magnetic stirrer).
8. Once dissolved, if magnetic stirrer is being used, remove the magnet.
9. Transfer procaine solution to an accurate measuring vessel (e.g. graduated cylinder or volumetric flask. Top up to the final volume with sterile water or saline, according to the formula being used.
10. Pour contents back into beaker for final stirring. Solution is now ready to sterilize.

Procaine 20mg/ml
Prepared with 0.9% Saline and 8.4% Sodium Bicarbonate

Final Volume (ml)	Procaine USP (mg)	Bicarb 8.4% (ml)	Makes approx # 10ml vials
10	[redacted]	[redacted]	[redacted]
50	[redacted]	[redacted]	[redacted]
100	[redacted]	[redacted]	[redacted]
250	[redacted]	[redacted]	[redacted]
500	[redacted]	[redacted]	[redacted]

Procaine 20mg/ml
Prepared with 0.9% Saline and Sodium Bicarbonate Powder

Final Volume (ml)	Procaine USP (mg)	Sodium Bicarb (mg)	Makes # 10ml vials
10	[redacted]	[redacted]	[redacted]
50	[redacted]	[redacted]	[redacted]
100	[redacted]	[redacted]	[redacted]
250	[redacted]	[redacted]	[redacted]
500	[redacted]	[redacted]	[redacted]

Procaine 20mg/ml
Prepared with Sterile Water, NaCL Powder and 8.4% Bicarbonate

Final Volume (ml)	Procaine USP (mg)	Bicarb 8.4% (ml)	NaCL USP (mg)	Makes # 10ml vials
10	[redacted]	[redacted]	[redacted]	[redacted]
50	[redacted]	[redacted]	[redacted]	[redacted]
100	[redacted]	[redacted]	[redacted]	[redacted]
250	[redacted]	[redacted]	[redacted]	[redacted]
500	[redacted]	[redacted]	[redacted]	[redacted]

Procaine 20mg/ml
Prepared with S[redacted]

Final Volume (ml)	[redacted]	[redacted]	[redacted]	[redacted]
10	[redacted]	[redacted]	[redacted]	[redacted]
50	[redacted]	[redacted]	[redacted]	[redacted]
100	[redacted]	[redacted]	[redacted]	[redacted]
250	[redacted]	[redacted]	[redacted]	[redacted]
500	[redacted]	[redacted]	[redacted]	[redacted]

* See appendix A for supporting research

APPENDIX A

Research supporting e

1. Journal o
   February
2. Mayo Cli
3. Journal o

Conclusions:

- Procaine solution stored at a s maintains 79% potency.
- can be extended by beyond the published expiry