

Pharmaco-economic analysis of minimization of the costs for a set of anesthesia epidural.

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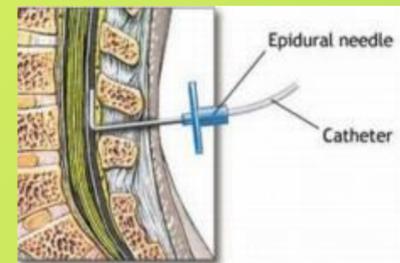
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PROJECT

The epidural act requires many medical devices (DM). Currently, an industrial kit, DM in « free » distribution and a home-made tray realise by sterilization containing compresses and wells are used.

This practice raises several issues : waste of time, various supply areas (pharmacy, sterilization), various storage places, dissatisfaction with the use of the service. A cost minimization analysis was performed to address these issues.



MATERIALS AND METHODS



An evaluation questionnaire filled by anesthesiologists and nurse anesthetists (IADE) to redefine the necessary equipment in view of the procedure performed (unsatisfactory field, unused components...). A market study was conducted among different laboratories. A meeting with the delegates allows to expose our needs, to seek a solution suitable according to their products and allow to run trial of different compositions.

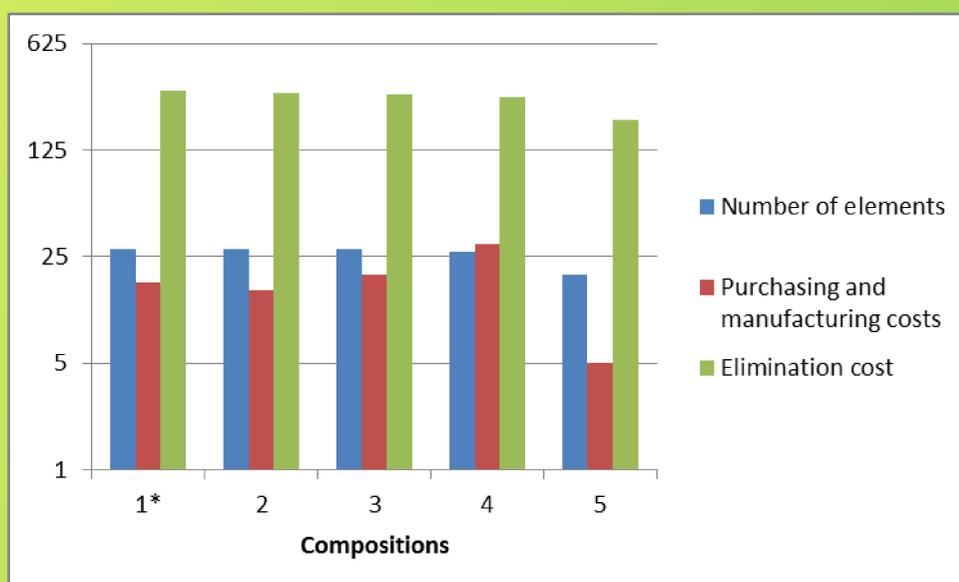
To perform this study, all committed and avoided costs are compared for five different compositions including the one currently in place in one year of use.

RESULTS

Current composition (No.1)		
	1 (Reference)	Cost (€)
Industrial kit	Epidural needle 17Ga	8,31
	Péridural catheter 19Ga	
	Filtter 0,2 µm	
	Luer-lock syringe 10 ml	
« Free » distribution	Injection needle 22Ga	0,02
	3 luer-lock syringes 7/10 ml	0,33
	1 field 90*110 sterile	3,23
	10 compress 10*10 cm	0,62
Made and delivered by sterilization	1 « anesthesia tray » UU sterile : 1 tray with recycled cardboard 33*25*2 1 tray with recycled cardboard 20*15*2 5 compress 10*10 cm	2,64
	2 cup UU 120 ml	1,96
TOTAL		17,11

The establishment uses an average of 2,000 kits per year.

- **Composition No. 1**, Method currently in use (Industrial Kit (supplier A) + DM free distribution + a home-made tray) is our reference* .
- **Proposal No. 2 and 3** differs from the current practice only by the field, from B and C. suppliers
- **Composition No. 4** is a kit of supplier A, standardized , more complete that the current kit with materials for and "around" the act.
- Finally, the **proposal No. 5**, includes a complete set containing material "around the act" custom-made in collaboration with supplier D + industrial kit of supplier A already used in the composition No. 1



No.	Purchasing and manufacturing costs (€ VAT)	Field quality	Number of elements	Wasted elements	Elimination cost DASRI (€ VAT/year)	Total cost (€ VAT/year)	% difference
1	17,12	Unsatisfactory	28	5	307	34547	Reference
2	15,25	Unsatisfactory	28	5	297	30797	-11%
3	18,99	Unsatisfactory	28	5	292	38272	+11%
4	29,90	Very satisfactory	27	4	277	60077	+74%
5	13,60	Very satisfactory	23	0	282	27482	-21%

Avoided spending over one year - Composition No.5			
MO* sterilization	MO* IADE	Purchasing cost	Elimination cost
8 360 €	291 €	7040 €	25 €

MO = Workforce



Collaboration between the different parties (user, customer, supplier) led to the least expensive strategy while improving the composition to find the perfect balance the user requires. Moreover, the time saved by sterilization can be transfered on other activities such as the reconstruction of surgical trays.