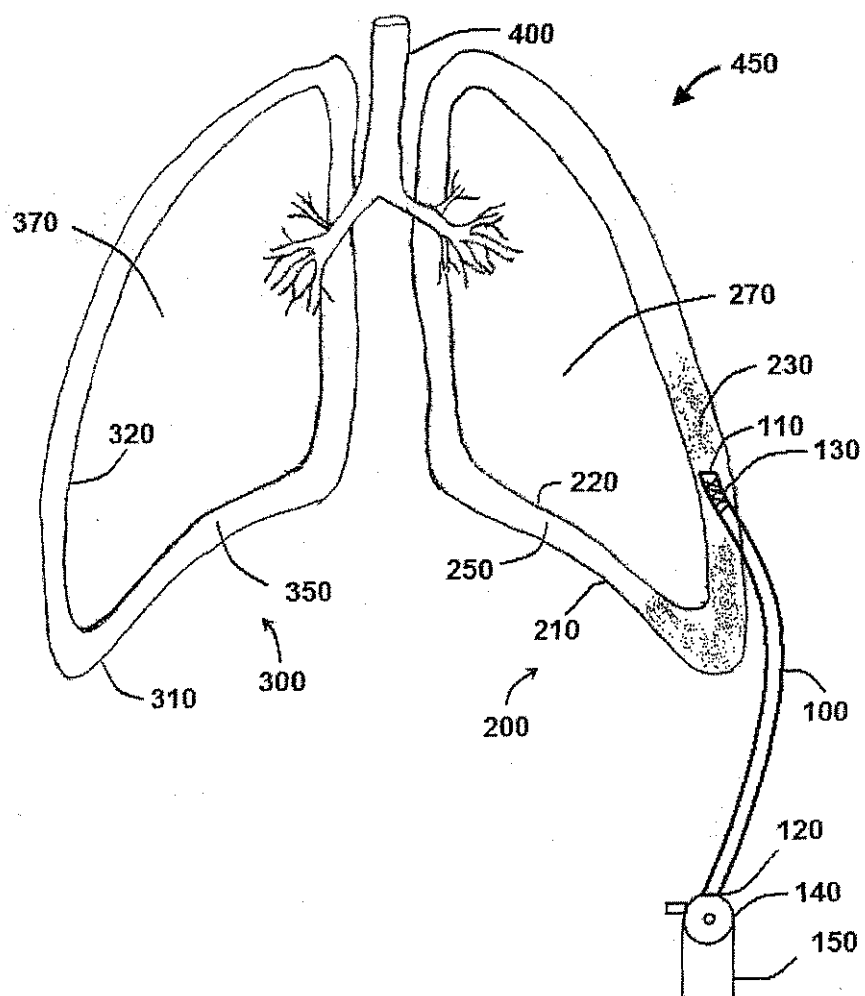
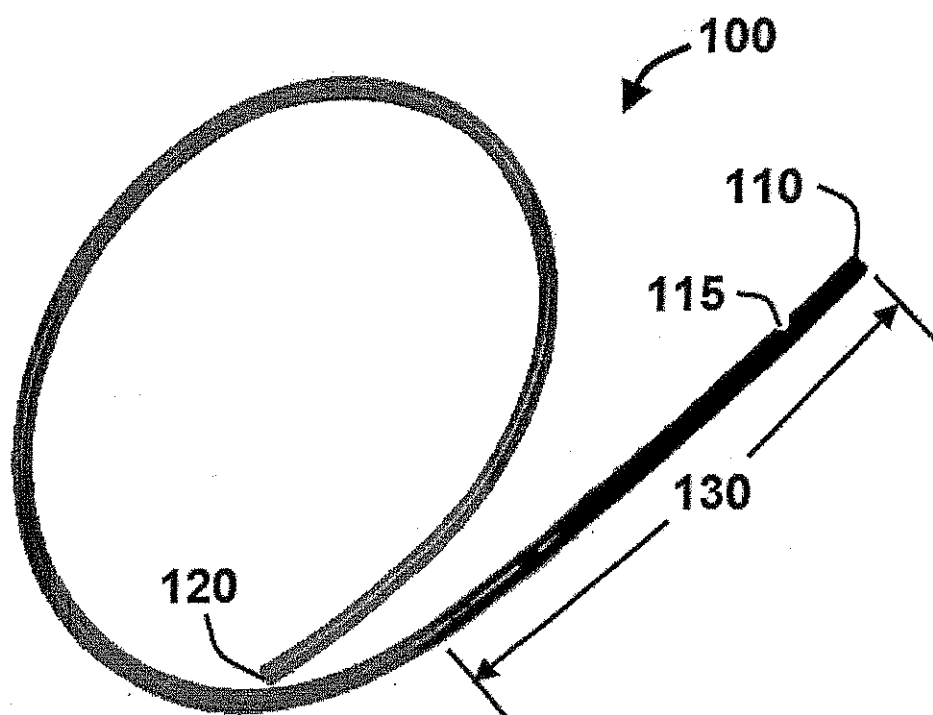


**FIG. 1**

**FIG. 2**

Individual Specimens – Silver Nitrate Injections

Number of animals	Concentration AgNO ₃	Volume per dose	Total dose (mg/kg)	Daily dose (mg/kg)	Day(s) of administration	Average score (treated)	Average score (control)	Total fluid drained	Max fluid drained in 24 hour period
2	0 %	1ml/kg	0	0.00	1	1	1	0.7	0.4
2	0 %	1ml/kg	0	0.00	5	1	1	2.3	0.9
2	0.85 %	1ml/kg	8.5	8.00	1	8	1.5	59.25	25
2	0.425 %	1ml/kg	4.25	4.25	1	8	1	47	21
2	0.085 %	1ml/kg	0.8	0.80	1	4.75	1	48	19
2	0.085 %	1ml/kg	4.25	0.80	5	7.5	1	0.5	0.5
2	0.085 %	1ml/kg	11.9	0.80	14	8	1	55.5	20
2	0.05 %	1ml/kg	0.5	0.50	1	1.5	1	0.25	0.5
4	0.05 %	1ml/kg	2.5	0.50	5	3.25	1	16.75	5
4	0.05 %	1ml/kg	7	0.50	14	6.5	1	21	4.625

FIG. 3A

Average pleurodesis score on treated side with multi-day silver nitrate injections

Days\Concentration SN	0.850%	0.425%	0.085%	0.050%	Placebo
1	8	8	4.75	1.5	1
5			7.5	3.25	1
14			8	6.5	1.5

FIG. 3B

Average Pleurodesis Score on Treated Side with Multi-Day Silver Nitrate Injections

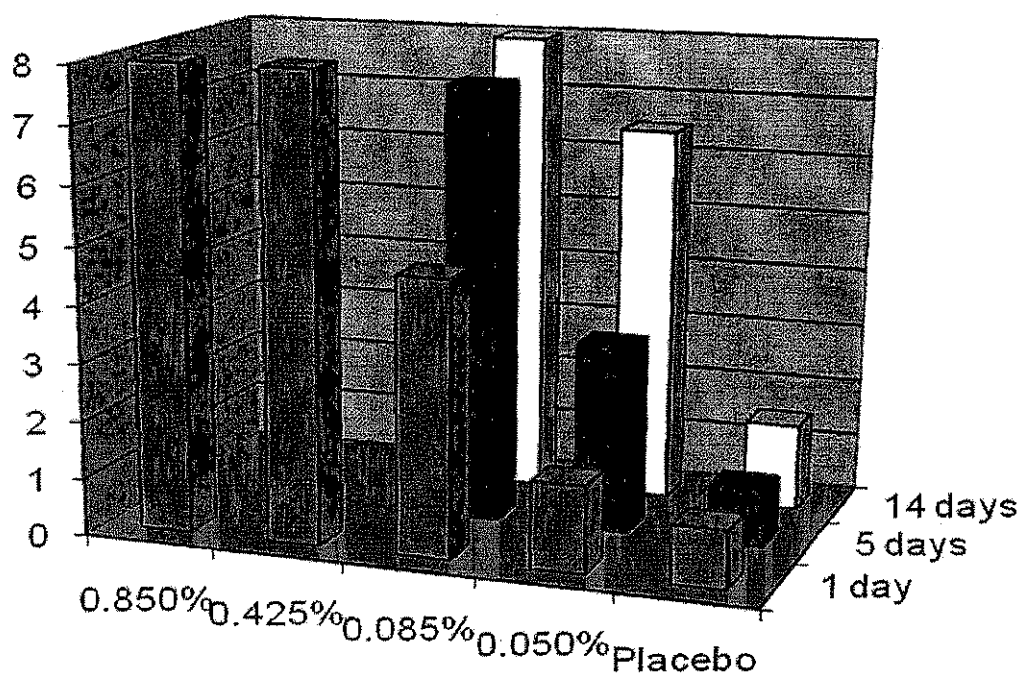


FIG. 3C

N	Volum e per dose	Total dose (mg/kg)	Daily dose (mg/kg)	Day(s) of administration	Averag e score (treated)	Averag e score (control)	Total fluid draine d	Max fluid drained in 24 hour period
2	1ml/kg	0	0.00	1	1	1	0.7	0.4
2	1ml/kg	0	0.00	5	1	1	2.3	0.9
2	1ml/kg	10	10.00	1	4.5	1	8	6
2	1ml/kg	5	5.00	1	2.5	1	22.5	9
2	1ml/kg	25	5.00	5	5	1	5.5	5.5
2	1ml/kg	70	5.00	14	7.5	1	20	7
2	1ml/kg	5	1.00	5	1	1	0	0
2	1ml/kg	14	1.00	14	1	1	0	0

FIG. 4A

Average Pleurodesis Score on Treated Side with Multi-Day Injections of Doxycycline

Days/Doxycycline(mg/kg)	10 mg/kg	5 mg/kg	1 mg/kg	Placebo
1	4.5	2.50		1
5		5.00	1	1
14		7.50	1	1.5

FIG. 4B

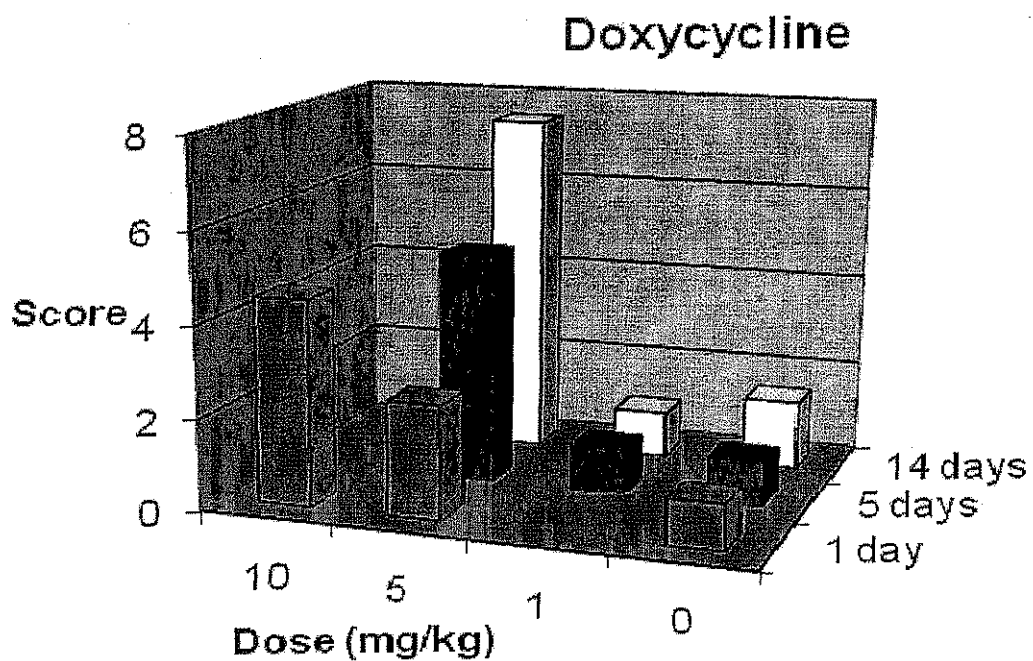


FIG. 4C

Scale for macroscopic pleural evaluation.

A score of ≥ 5 is considered a successful pleurodesis.

1	No adhesions between the visceral and parietal pleura.
2	Rare adhesions between the visceral and parietal pleura with no symphysis.
3	A few scattered adhesions between the visceral and parietal pleura with no symphysis.
4	Many diffuse adhesions between the visceral and parietal pleura away from catheter site with no symphysis.
5	Many diffuse adhesions between the visceral and parietal pleura away from catheter site with symphysis involving less than 5% of the hemithorax or limited to catheter site.
6	Many diffuse adhesions between the visceral and parietal pleura away from catheter site with symphysis involving 5 to 25% of the hemithorax and with a component of symphysis away from the catheter site.
7	Many diffuse adhesions between the visceral and parietal pleura away from catheter site with symphysis involving 25 to 50% of the hemithorax and with a component of symphysis away from the catheter site.
8	Many diffuse adhesions between the visceral and parietal pleura away from catheter site with symphysis involving greater than 50% of the hemithorax and with a component of symphysis away from the catheter site.

FIG. 5

Individual Pleurodesis Scores for Small Animal Study

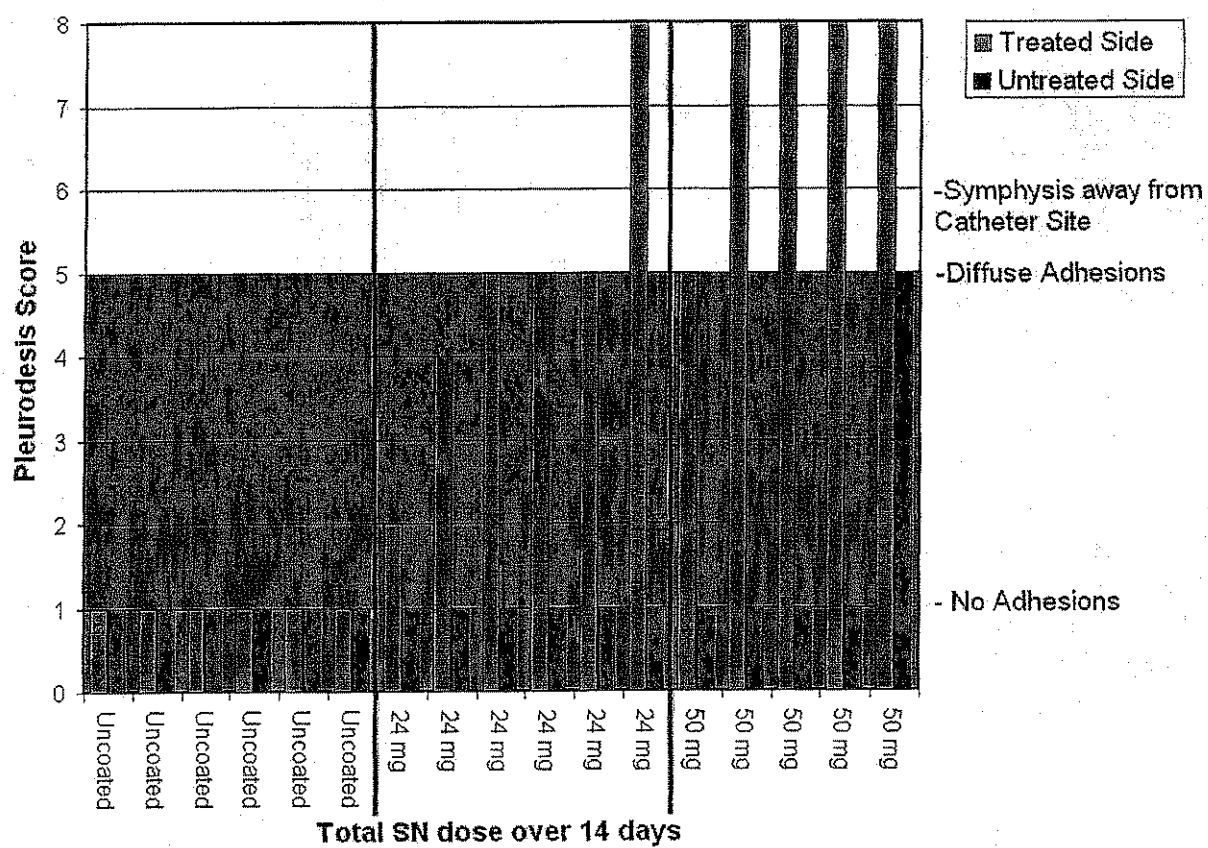
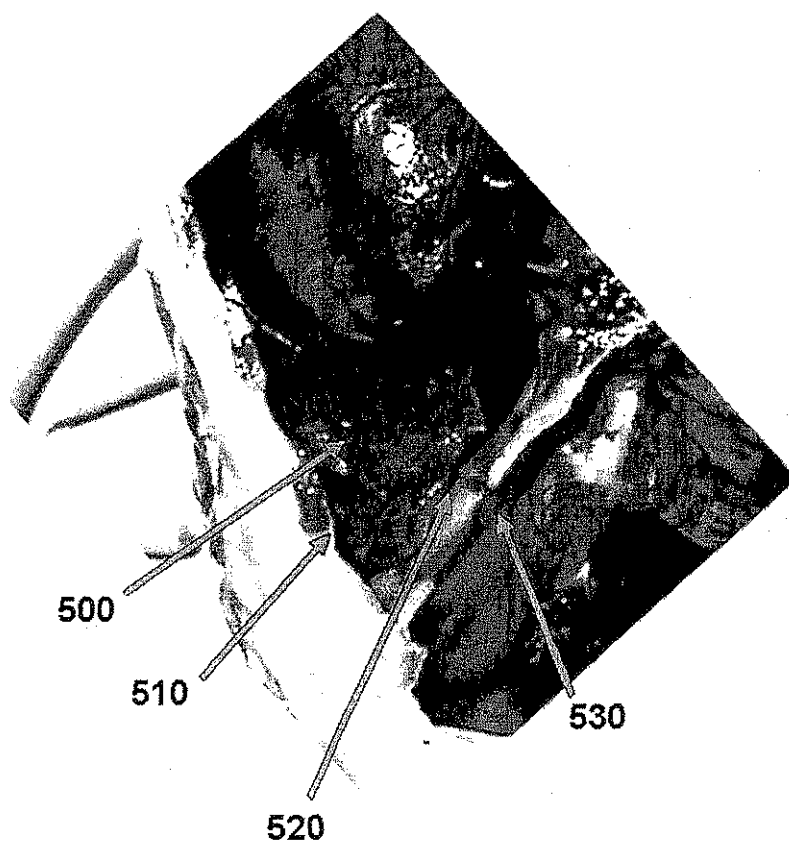


FIG. 6

Mean Scores

Catheter Type	Dose	Score treated side	Score control side
Uncoated	0 mg	1	1
Silver Nitrate	24 mg	4.82†	1‡
Silver Nitrate	50 mg	7.4†	1.6*
†p=0.001 vs uncoated			
*p=0.011 vs contralateral side			
‡p=0.005 vs contralateral side			

FIG. 7**FIG. 8**

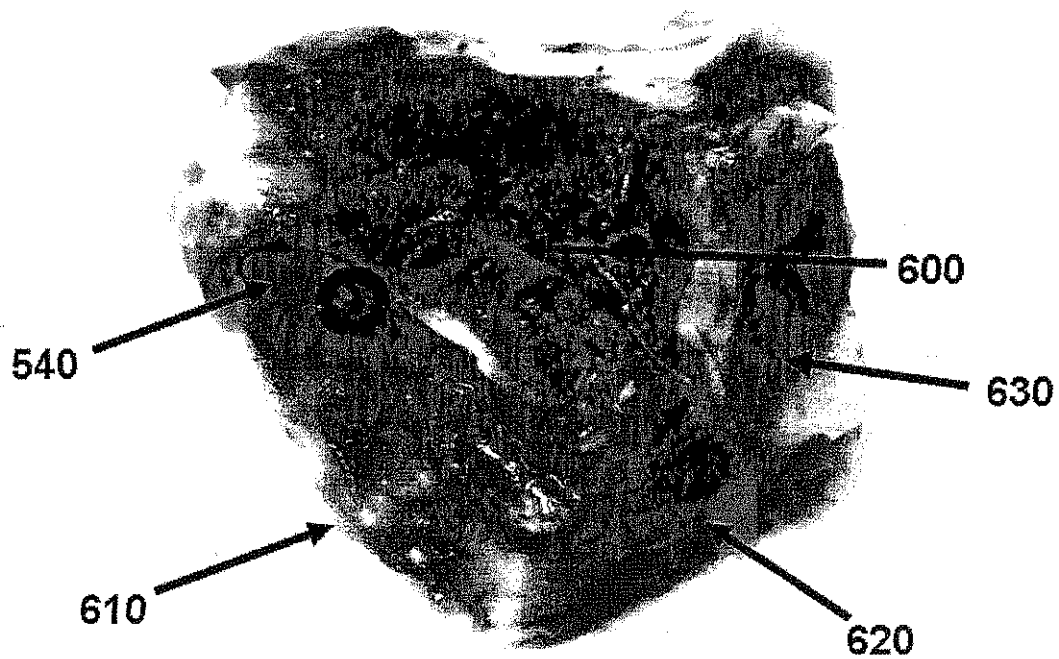
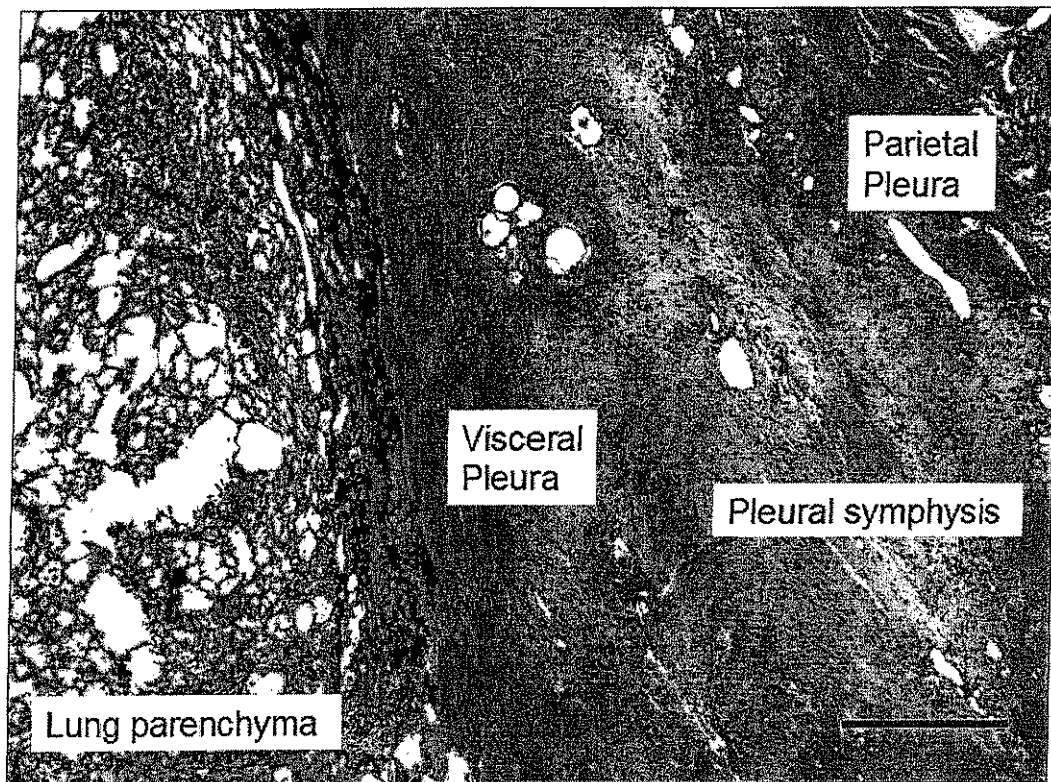
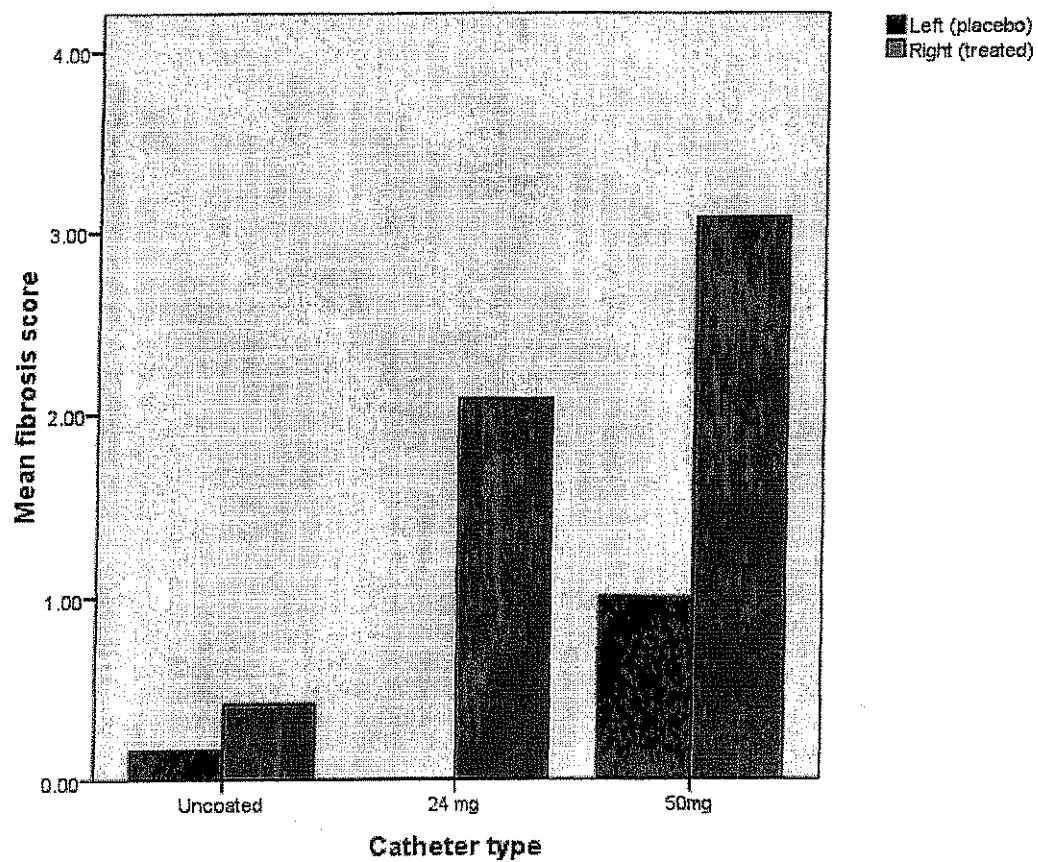


FIG. 9A



Bar represents
500 micrometres

FIG. 9B

**FIG. 9C**

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Pleurodesis Scores for Large Animals treated with Silver Nitrate Sustained Release Catheters

Dose:	1 g		750mg		Placebo	
	Score Treated Side	Score Untreated Side	Score Treated Side	Score Untreated Side	Score Treated Side	Score Untreated Side
	8	1	5	1	1	1
	7	1	8	1	1	1
	7	1	7	1	1	1
	*	1	**	**	1	1
Average	7.33	1.00	6.67	1.00	1.00	1.00

*removed day 3. **did not undergo catheter placement

FIG. 10

Individual Pleurodesis Scores for all large animals treated with a Silver Nitrate Sustained Release Catheter

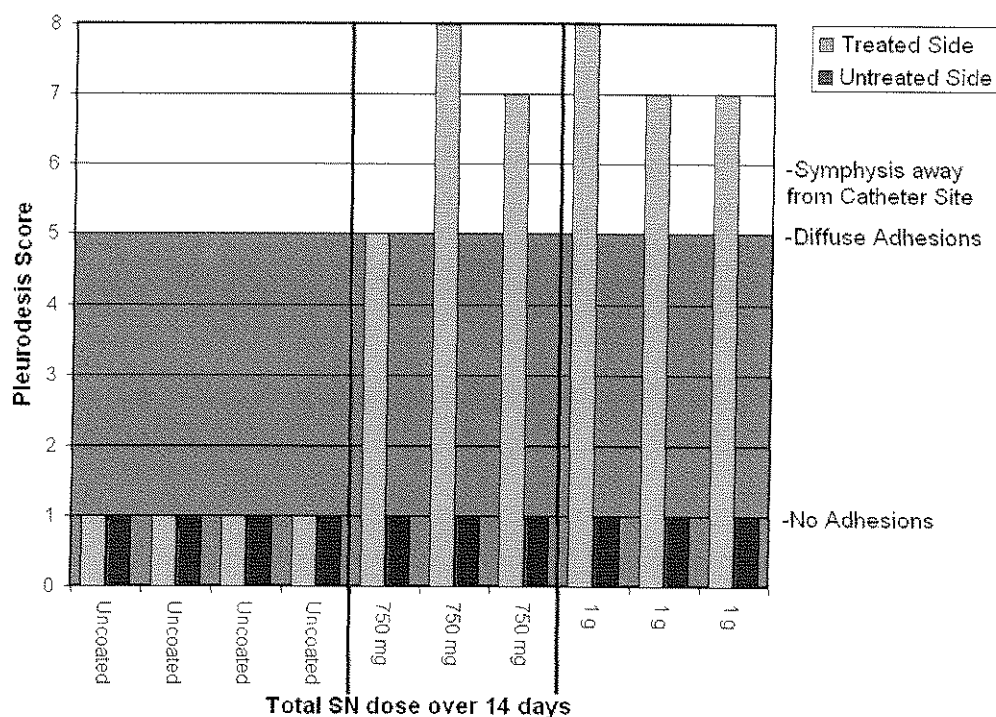
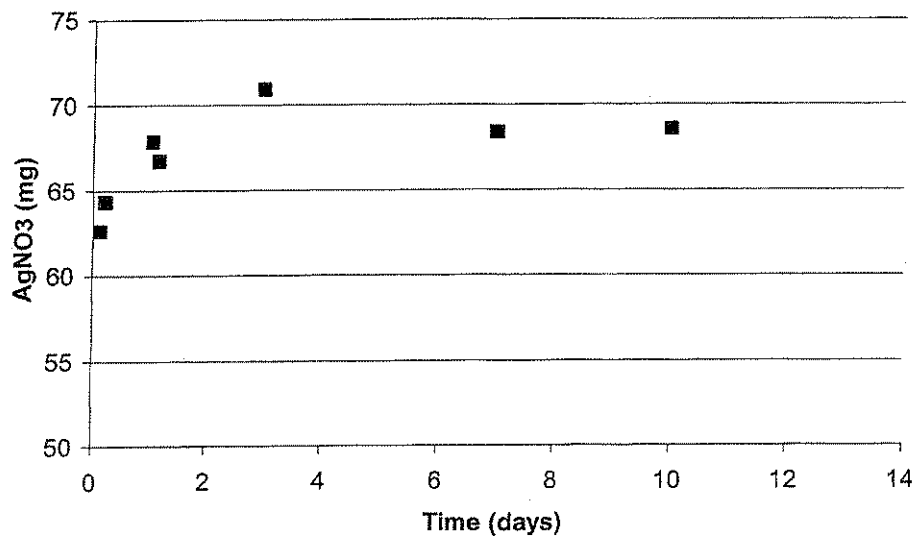
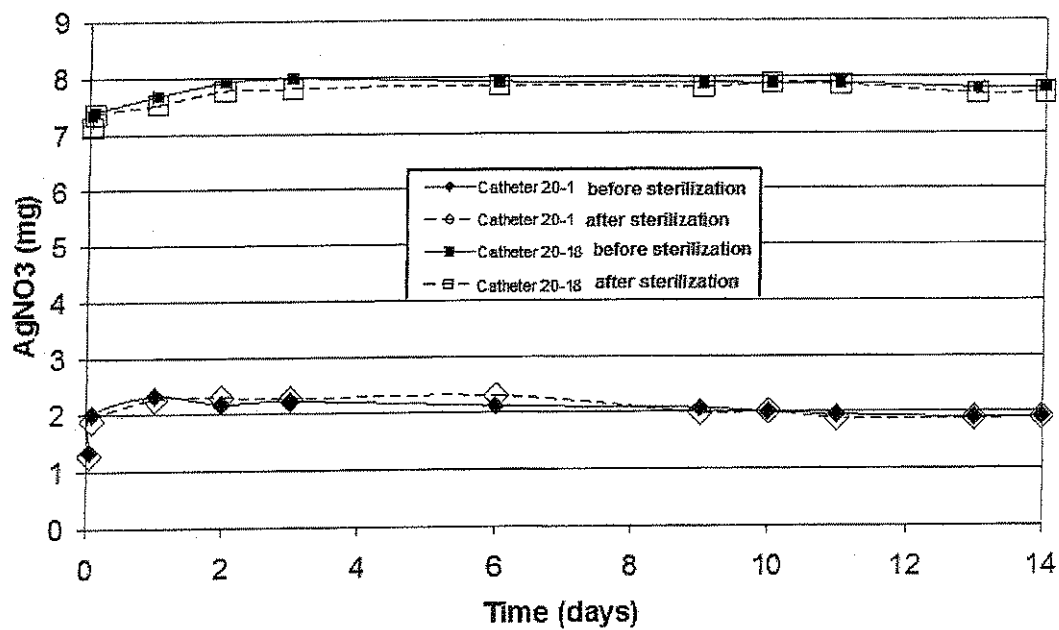
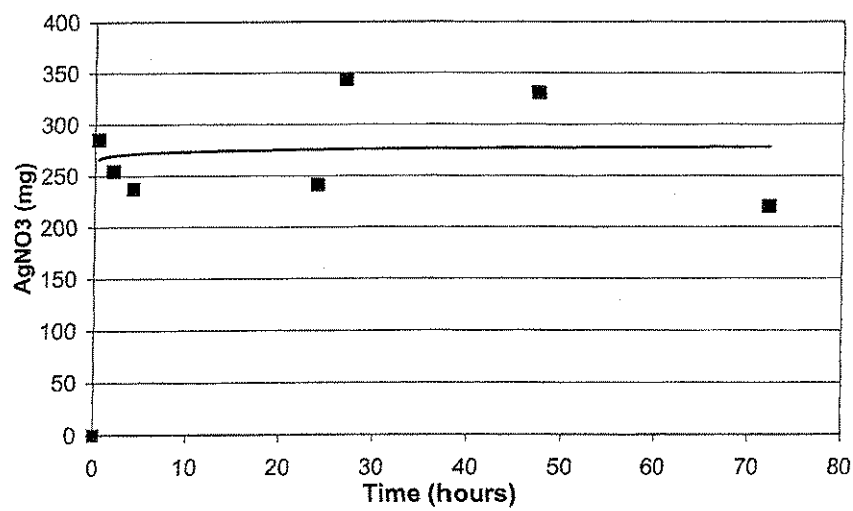
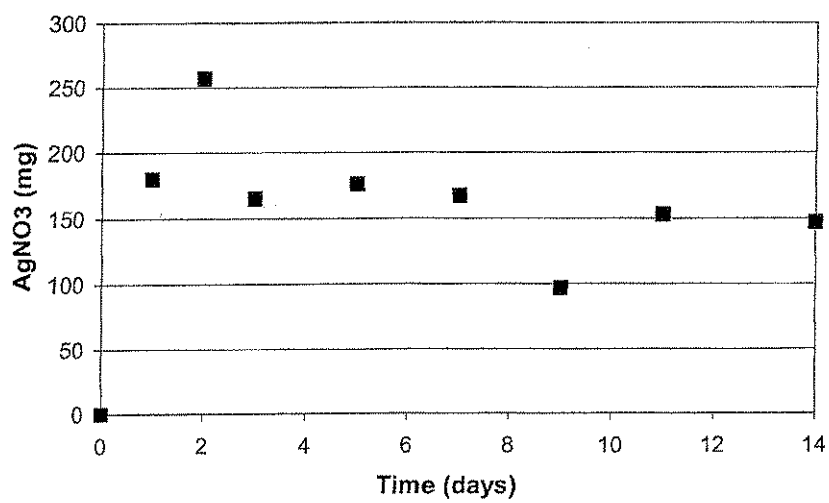


FIG. 11

**FIG. 12****FIG. 13**

**FIG. 14****FIG. 15**