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# Surgical treatment of spinal metastases

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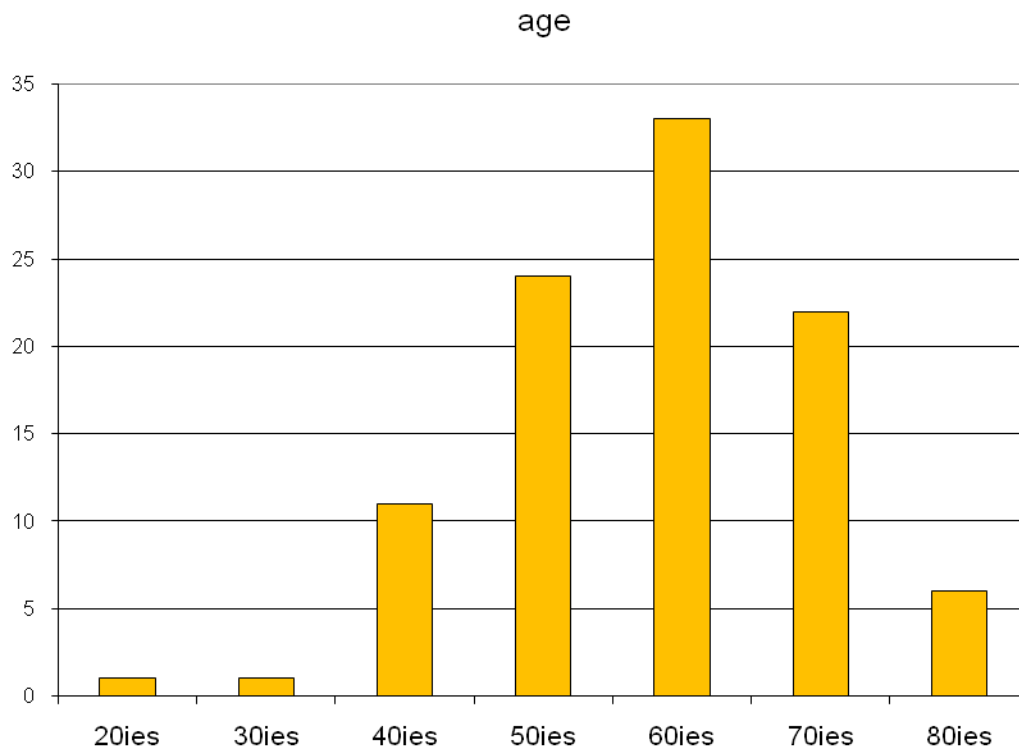
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# Epidemiology



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- n=98
- Median age: 62years
- Male:female = 61:37

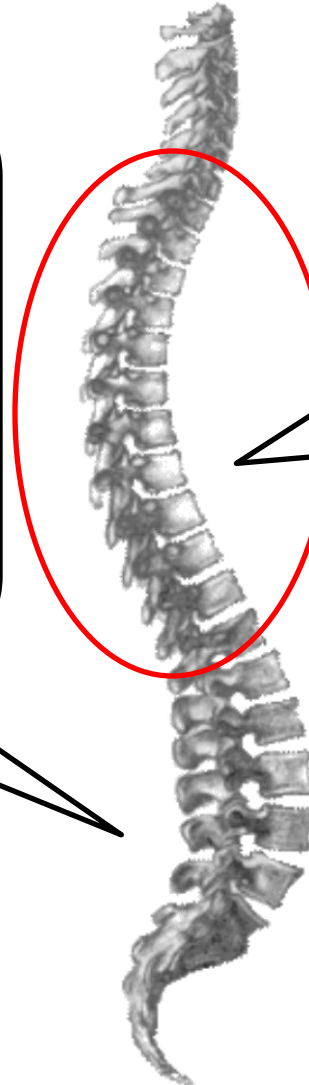
# Approach, n=98



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dorsal

cerv	5
cervthor	5
thor	25
thorlumb	12
lumb	9
lumbsac	2
total	58



ventro-dorsal

cerv	2
cervthor	3
thor	15
thorlumb	7
lumb	13
total	40

# Surgery



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- All but one had dorsal instrumentation and laminectomy
- 38 underwent additional ventral procedure
- 31 revision operations (23 patients), 3 due to major complication

# Frankel Score



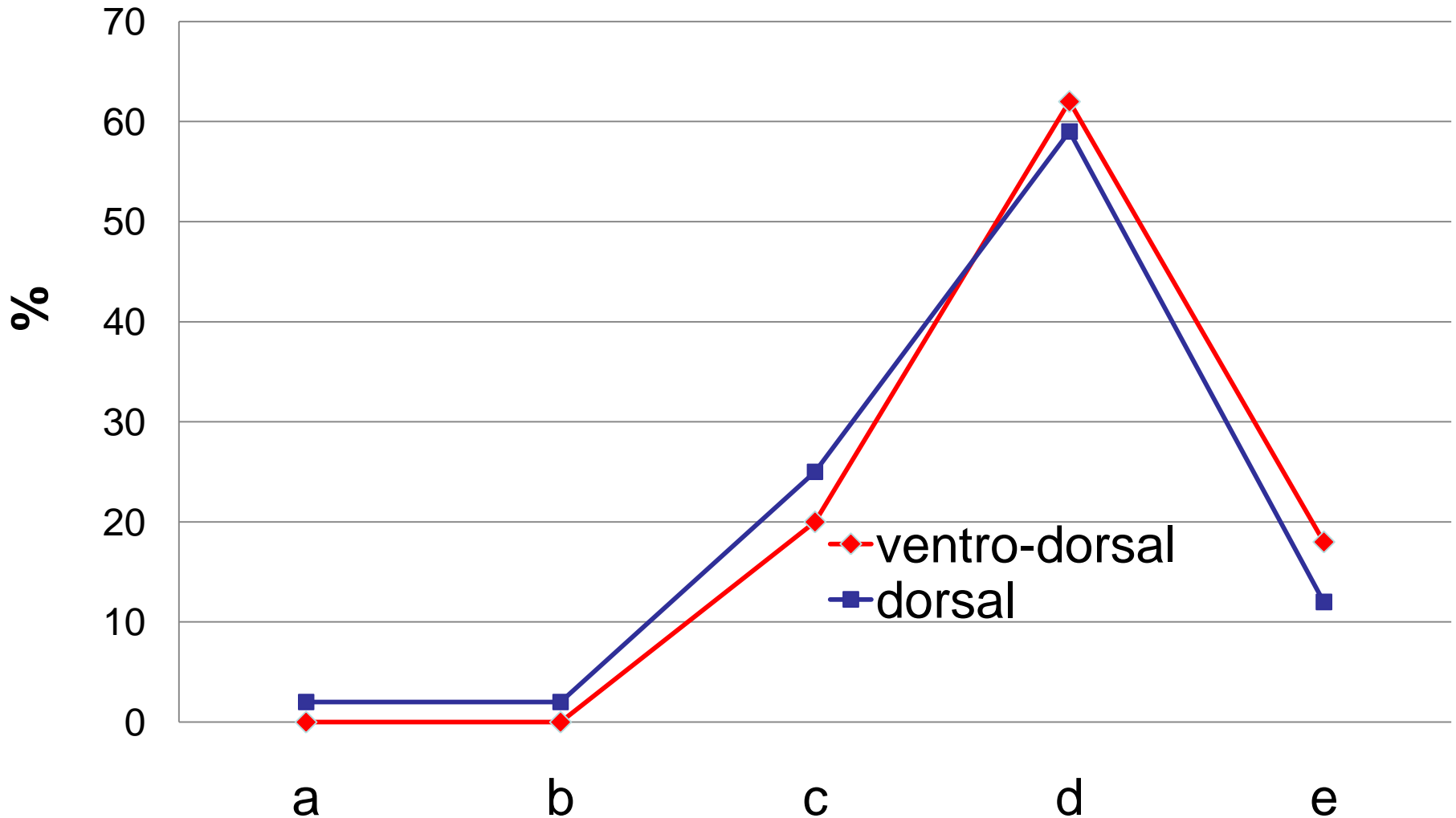
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- A Complete
- B Incomplete. Sensory but not motor function
- C Incomplete. Motor function is preserved and key muscles has a muscle grade lower than 3
- D Incomplete. Motor function is preserved and key muscles has a muscle grade higher or equal to 3
- E Sensory and motor function is normal

# Comparison Frankel Score preoperativ dorsal vs. ventro-dorsal; n=98



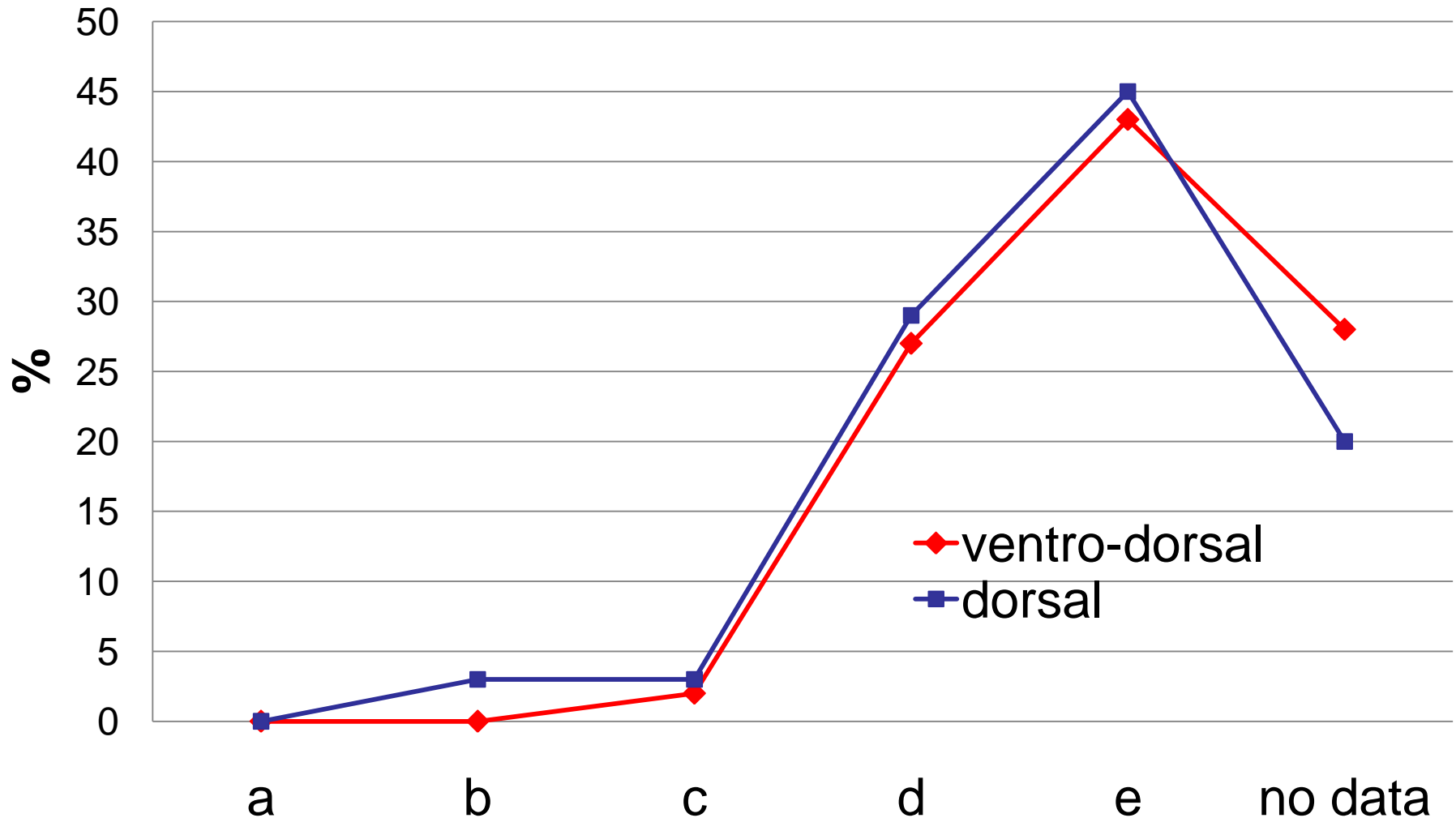
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# Comparison Frankel Score postoperative dorsal vs. ventro-dorsal; n=98



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# Comparison dorsal vs. dorso-ventral; n=98



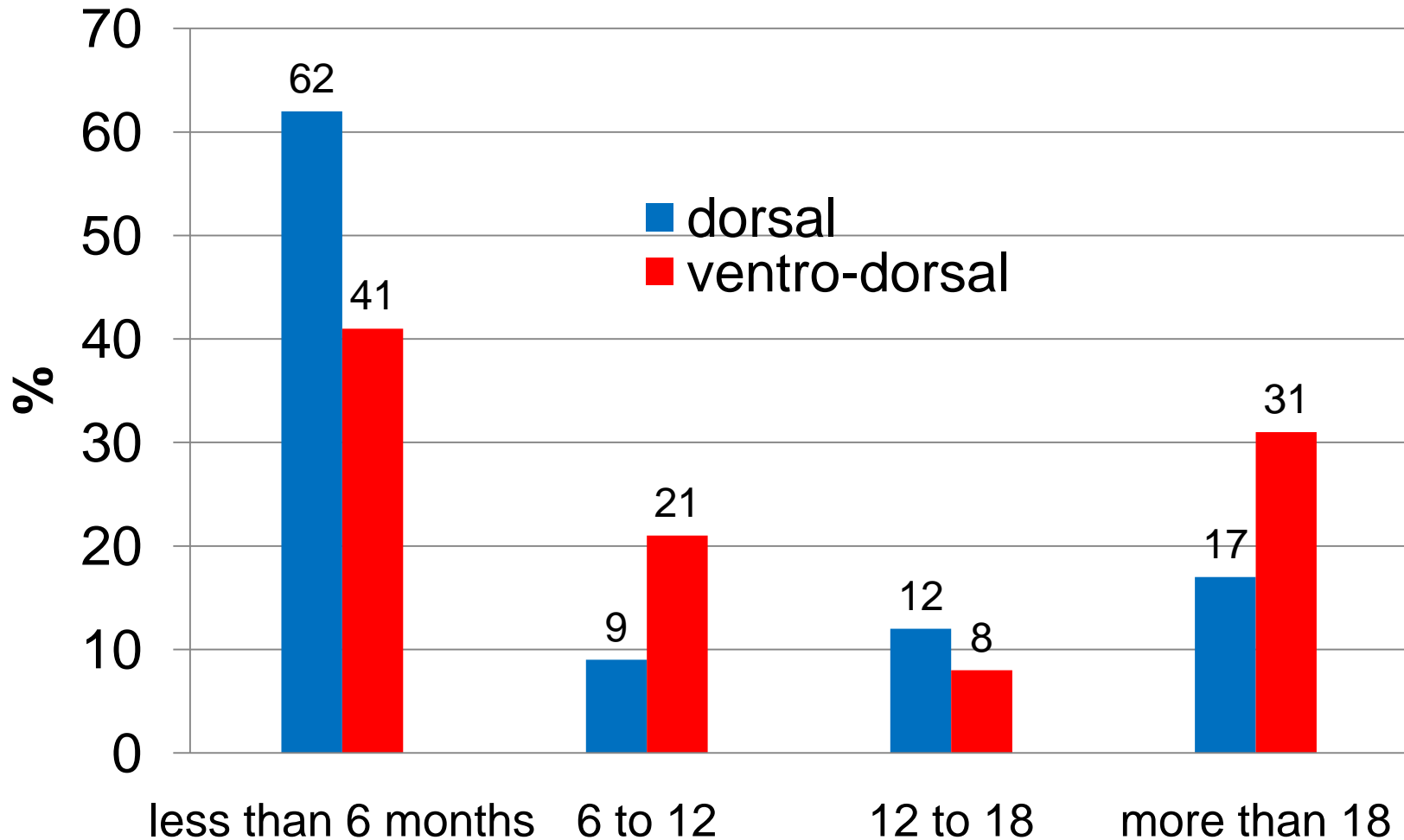
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	ventro-dorsal n=39	dorsal n=59
<b>Complication</b>	n=4	n=11
<b>survival median</b>	10,7	4,4
<b>SD</b>	18,7	13,1
<b>survival mean</b>	15,8	11
<b>frankel preop. %</b>	ventro-dorsal n=39	dorsal n=59
<b>A</b>	0	2
<b>B</b>	0	2
<b>C</b>	20	25
<b>D</b>	62	17
<b>E</b>	18	59
<b>frankel postop. %</b>	ventro-dorsal n=39	dorsal n=59
<b>A</b>	0	0
<b>B</b>	0	3
<b>C</b>	2	3
<b>D</b>	27	29
<b>E</b>	43	45
<b>no data</b>	28	20

# Comparison survival dorsal vs. dorso-ventral; n=98



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# Comparison dorsal vs. Ventro-dorsal; n=98



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- restored motor function
- patients with poor life expectancy should be limited to posterior stabilization
- 38% of patients with survival rates less than 12 months regain motor function.

## Literature:

- 1. Costa L, Badia X, Chow E, Lipton A, Wardley A. Impact of skeletal complications on patients' quality of life, mobility, and functional independence. *Supportive Care in Cancer*. 2008;16(8):879-889.
- 2. Coleman RE. Bisphosphonates: Clinical Experience. *The Oncologist*. 2004 9;9(suppl\_4):14-27.



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