SOCIETAT CATALANOBALEAR DE GERIATRIA I GERONTOLOGIA

Grup de Demències
Societat Catalana de
Geriatria i Gerontologia

Infeccions en demència evolucionada

Rosa Ana Sabaté Garcia
Geriatra. Parc de Salut Mar.
Febrer 2018





Parc de Salut Barcelona
MAR

European Journal of Neurology 2009, **16:** 488–492 doi:10.1111/j.1468-1331.2008.02503.x

Cause of death in patients with dementia disorders

H. R. Brunnström and E. M. Englund
Department of Pathology, University Hospital, Lund, Sweden

Table 1 Cause of death in patients with dementia disorder (n = 524) and in the general population aged 65 years and older (the latter from national official statistics)

Cause of death	Demented patients (%)	General population (%)
Neoplasm	**3.8**	**21.3**
Circulatory system disease	**37.4**	**47.9**
Ischaemic heart disease	23.1	22.0
Cerebrovascular disease	4.2	11.5
Pulmonary embolism	5.7	0.7
Other circulatory system disease	4.4	13.7
Respiratory system disease	**45.8**	**7.4**
Bronchopneumonia	38.4	2.8[a]
Aspiration pneumonia and asphyxia	6.7	0.2
Other respiratory system disease	0.8	4.5
Digestive system disease	**4.2**	**3.2**
Genitourinary system disease	**2.3**	**1.7**
Other cause	**6.5**	**18.5**
Cachexia	2.1	[b]
Traumatic falls	0.6	[b]
Specified infection (including tuberculosis)	0.4	[b]
Unresolved	3.4	[b]

[a]Including influenza and lobar pneumonia.
[b]Data not presented.
Bold signifies main disease categories; subgroups are shown in normal text.

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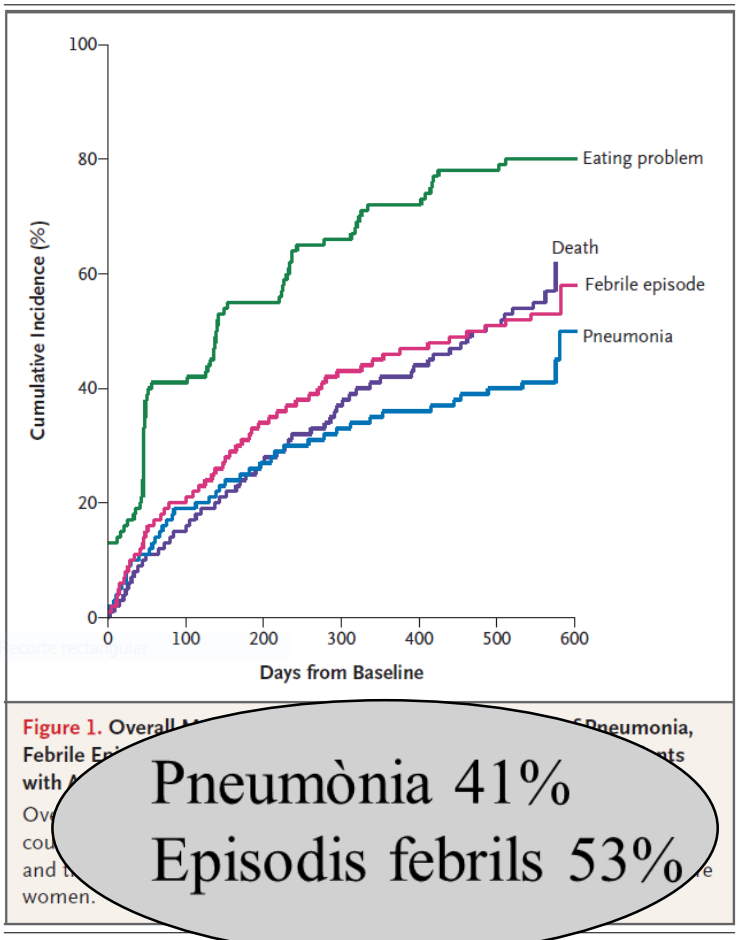
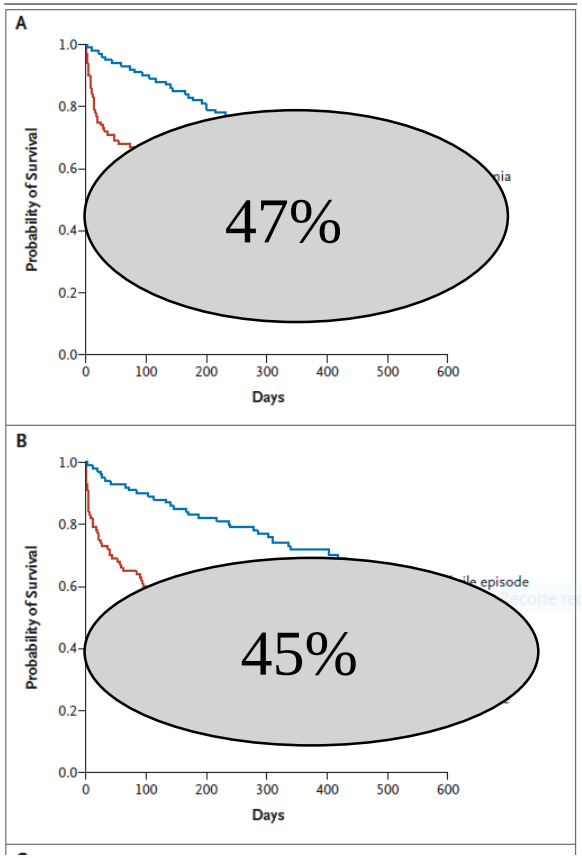
The Clinical Course of Advanced Dementia

Susan L. Mitchell, M.D., M.P.H., Joan M. Teno, M.D., Dan K. Kiely, M.P.H., Michele L. Shaffer, Ph.D., Richard N. Jones, Sc.D., Holly G. Prigerson, Ph.D., Ladislav Volicer, M.D., Ph.D., Jane L. Givens, M.D., M.S.C.E., and Mary Beth Hamel, M.D., M.P.H.





N: 323 nursing home residents amb demència evolucionada
Seguiment: 18mesos
CASCADE study

Supervivència Mitjana 478 dies

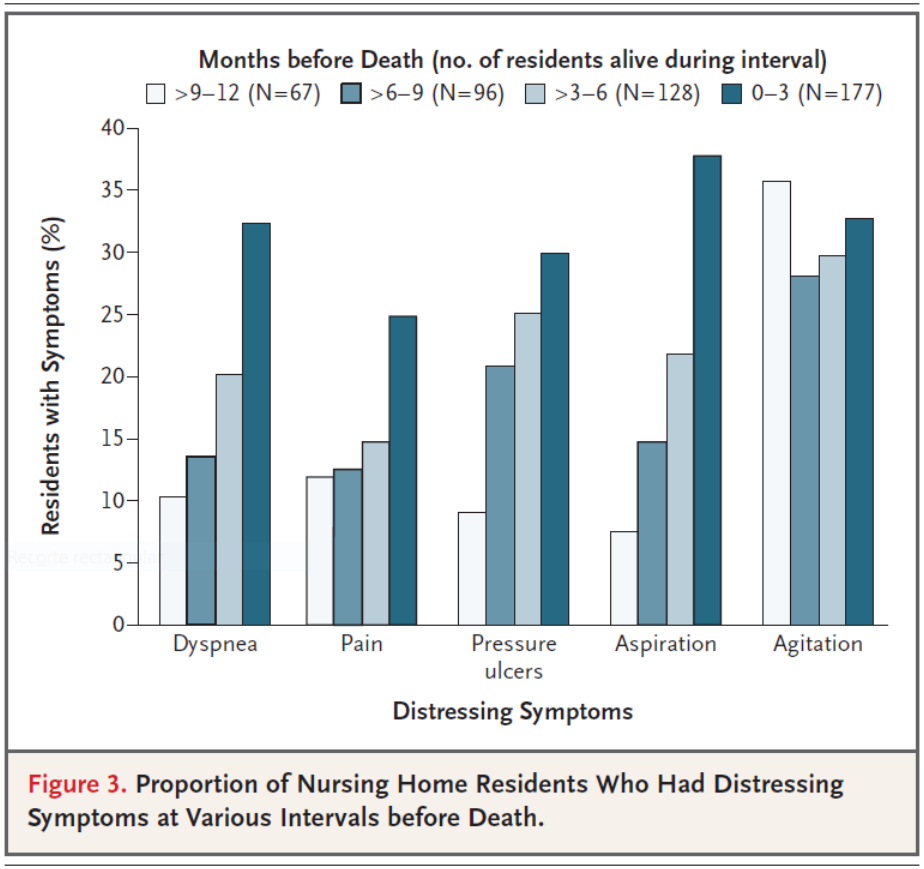


Figure 3. Proportion of Nursing Home Residents Who Had Distressing Symptoms at Various Intervals before Death.

- 34% tractament parenteral
- 17% hospitalitzats dels quals el 68% per pneumònia, seguit d'altres infeccions.
- 10% traslladar urgències
- 8% Nutrició enteral

Published in final edited form as:
J Am Geriatr Soc. 2012 May ; 60(5): 905–909. doi:10.1111/j.1532-5415.2012.03919.x.

Hospital Transfers Among Nursing Home Residents With Advanced Dementia

Jane L. Givens, MD, MSCE[1,2], **Kevin Selby, MD**[1], **Keith S. Goldfeld, MPA, MS**[3], and **Susan L. Mitchell, MD, MPH**[1,2]

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Abstract

Objectives—To describe diagnoses and factors associated with hospital transfer among nursing home (NH) residents with advanced dementia.

Design—Prospective cohort study.

Setting—22 Boston-area NHs.

Participants—323 NH residents with advanced dementia.

Measurements—Data were collected quarterly for up to 18 months. Data regarding transfers included: hospitalization or emergency department (ED) visit, diagnosis and duration of inpatient admission. The occurrence of any acute medical event (pneumonia, febrile episode or other acute illness) in the prior 90 days was obtained quarterly. Logistic regression conducted at the level of the acute medical event identified characteristics associated with hospital transfer.

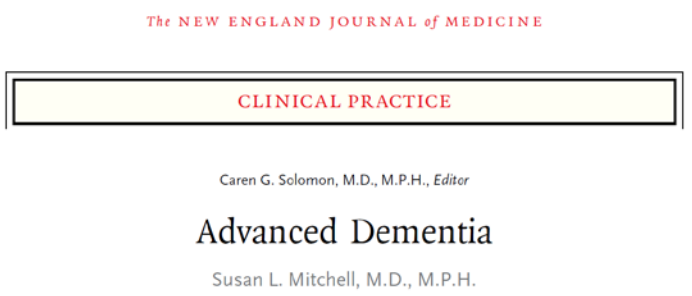
Results—The entire cohort experienced74 hospitalizations and 60 ED visits. Suspected infections were the most common reason for hospitalization (44/74, [59%]), most frequently attributable to a respiratory source (30/74, [41%]). Feeding tube-related complications accounted for 47% of ED visits. In adjusted analysis conducted among acute medical events, younger resident age, the event type (pneumonia or other event vs. febrile episode), chronic obstructive pulmonary disease and the lack of a DNH order (adjusted odds ratio 5.22, 95% CI 2.31-11.79) were associated with hospital transfer.

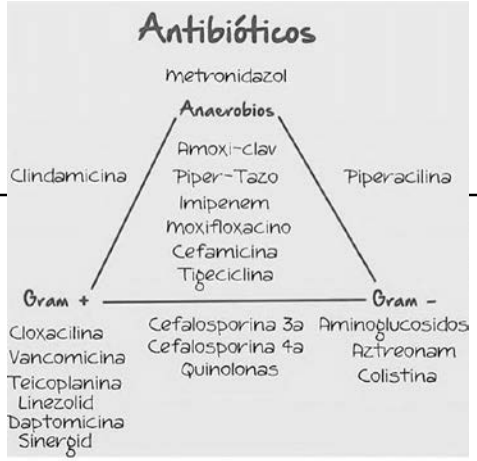
Conclusion—The majority of hospitalizations among NH residents with advanced dementia were due to infections, and thus, were potentially avoidable, as infections are often treatable in the NH setting. Feeding tube-related complications accounted for almost half of all ED visits, representing a common but under-recognized burden of this intervention. Advance care planning in the form of a DNH order was the only identified modifiable factor associated with avoiding hospitalization.

Hi va haver 610 events mèdics aguts dels quals van ser 225 Pneumònies, 343 episodios febrils, la majoria dels quals es va tactar a NH.

Quants porten antibiòtic?

- **52-66% de pacients amb demència evolucionada porten antibiòtic almenys un cop l'any**
- **42% de pacients amb demència 2 setmanes abans de morir havien portat antibiòtics**
- **SPREAD study (n 362, seguiment 12 mesos)**





Anamnèsi
Exploració física
Exploracions complementàries

→

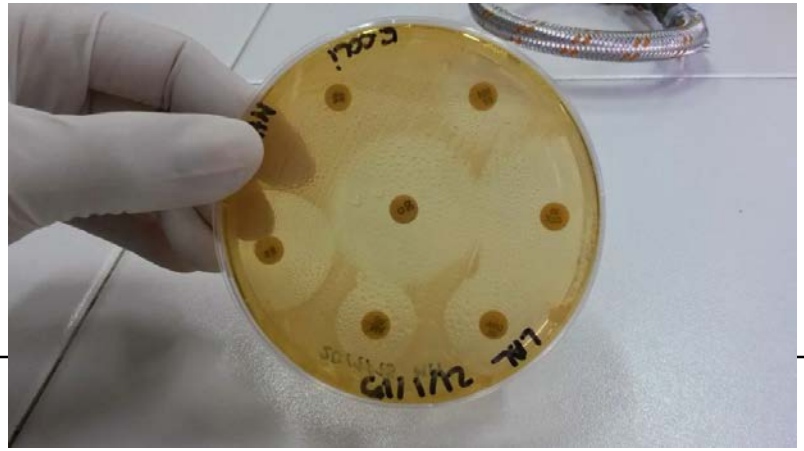
Diagnòstic mèdic

→

Tractament mèdic

→

Curació o mort



Diagnòstic

presentació atípica

– **Dificultats en el diagnòstic**

Dificultats en exploracions complementaries
i recollida de mostres

- Immunosenescència (tant en resposta cel·lular com humoral)
- Comorbilitats
- Polifarmàcia
- Reaccions adverses medicamentoses
- Instrumentalització (sondatges, alimentación parentetal…)
- Més contacte amb el sistema sanitari
- Més resistències
- Més prevalença de microorganismes no habituals
- Entorn (aïllament, probresa, CSS, hospitals…)
- Prevenció (vacunació, resposta disminuida…)

Topics in Long-Term Care

EDITED BY PHILIP W. SMITH, MD

Development of Minimum Criteria for the Initiation of Antibiotics in Residents of Long-Term–Care Facilities: Results of a Consensus Conference

Mark Loeb, MD, MSc; David W. Bentley, MD; Suzanne Bradley, MD; Kent Crossley, MD; Richard Garibaldi, MD; Nelson Gantz, MD; Allison McGeer, MD; Robert R. Muder, MD; Joseph Mylotte, MD; Lindsay E. Nicolle, MD; Brenda Nurse, MD; Shirley Paton, RN; Andrew E. Simor, MD; Philip Smith, MD; Larry Strausbaugh, MD

Clinical Practice Guideline for the Evaluation of Fever and Infection in Older Adult Residents of Long-Term Care Facilities: 2008 Update by the Infectious Diseases Society of America

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Infect Control Hosp Epidemiol. 2012 October ; 33(10): 965–977. doi:10.1086/667743.

Surveillance Definitions of Infections in Long-Term Care Facilities: Revisiting the McGeer Criteria

Nimalie D. Stone, MD[1], Muhammad S. Ashraf, MD[2], Jennifer Calder, PhD[3], Christopher J. Crnich, MD[4], Kent Crossley, MD[5], Paul J. Drinka, MD[6], Carolyn V. Gould, MD[1], Manisha Juthani-Mehta, MD[7], Ebbing Lautenbach, MD[8], Mark Loeb, MD[9], Taranisia MacCannell, PhD[1], Preeti N. Malani, MD[10,11], Lona Mody, MD[10,11], Joseph M. Mylotte, MD[12], Lindsay E. Nicolle, MD[13], Mary-Claire Roghmann, MD[14], Steven J. Schweon, MSN[15], Andrew E. Simor,

Signes i simptomes que suggereixen procés infecciós:

- Deteriorament funcional definit com aparició o empitjorament de confusió, incontinencia, caigudes, empitjorament de la movilitat, disminución de la ingesta, poca colaboració amb entorn. 77% de paciente amb deteriorament funcional pateixen procés infecciós Berman et al.
- Febra es defineix com: > 37,8ºC o Tº > 37,2ºC repetides vegades o > Tº > 1,1ºC de lo habitual (Tº oral).
- Recollida de cultius, valorar segons els benefici que aportarà


IDSA GUIDELINES

Clinical Practice Guideline for the Evaluation of Fever and Infection in Older Adult Residents of Long-Term Care Facilities: 2008 Update by the Infectious Diseases Society of America

Kevin P. High,[1] Suzanne F. Bradley,[2,3,4] Stefan Gravenstein,[5,6,7,8] David R. Mehr,[9] Vincent J. Quagliarello,[10] Chesley Richards,[11,12] and Thomas T. Yoshikawa[13,14]

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Topics in Long-Term Care

EDITED BY PHILIP W. SMITH, MD

Development of Minimum Criteria for the Initiation of Antibiotics in Residents of Long-Term-Care Facilities: Results of a Consensus Conference

Mark Loeb, MD, MSc; David W. Bentley, MD; Suzanne Bradley, MD; Kent Crossley, MD; Richard Garibaldi, MD; Nelson Gantz, MD; Allison McGeer, MD; Robert R. Muder, MD; Joseph Mylotte, MD; Lindsay E. Nicolle, MD; Brenda Nurse, MD; Shirley Paton, RN; Andrew E. Simor, MD; Philip Smith, MD; Larry Strausbaugh, MD

Table 1
Assessing Prescripti

- **Urinary tract in**
  - For reside adherent if at least 1 of the following 2 scenarios applied:
    1. fever*;
    2. a new , or new symptoms of delirium.
  - for reside d adherent if the resident had pain or difficulty with urination, *or* fever* *and* at least 1 of the follow...:
    1. new or increased urgency to urinate;
    2. new or increased frequency in urination;
    3. new or increased suprapubic pain;
    4. new case of costovertebral angle tenderness;
    5. obvious blood in urine; *or*
    6. new/worsened urinary incontinence.
- **Respiratory infection**
  1. Temperature higher than 102°F *and* either a respirato ;
  2. fever* *and* a new cough and a pulse greater than 100 b rate greater than 25 breaths per minute;
  3. if afebrile, a diagnosis of chronic obstructive pulmona purulent sputum; *or*
  4. if afebrile with no COPD diagnosis, a new cough that p han 25 or symptoms of delirium.

2.4°F above the resident's average routine temperature, *or* over 100°F.

Febra sense focus:
Fiebre > 37,9ºC (o > 1,5ºC de Tª habitual)
+ Delirium o calfreds
Si després de 3-5 d'antibiòtic no millora, probablemente no infecciós

Si febra > 38,9ºC: Només una de les següents:
FR > 25/min
Tos productiva
Si febra > 37,9ºC (o > 1,5ºC de Tª habitual):
Tos + una de les següents:
FC > 100
Delirium
Calfreds
FR >25/min
Si afebril + EPOC: Tos amb augment de la expectoració purulenta.
Afebril NO EPOC: Tos nova amb expectoració purulenta + FR>25/min
sació nova a Rx qualsevol dels següents será criteri ibiòtic: FR >25/min, tos productiva, febra > 37,9ºC de Tª habitual).

1. Aparició o augment d'exudat purulent
2. Almenys 2 de:
   1. Febra > 37,9ºC o Augment 1,5ºC de Tº habitual
   2. Eritema
   3. Edema
   4. Calor
   5. Inflamció tumefacció

Table 1
Comparison of Criteria for Diagnosing and/or Treating Noncatheter-Related Urinary Tract Infection (UTI) in Long Term Care (LTC) Settings

1991 McGeer[10]	2012 Stone (Updated McGeer)[11]	2005 Loeb Diagnostic[9]	2005 Loeb Treatment[9,†]
Intended Surveillance and Benchmarking		Minimum Criteria for Ordering a Urine Culture	Minimal Criteria for Initiating Antimicrobials
		Fever >37.9°C and 1 or more of the following, order a urine culture: • Dysuria • Urgency • Flank pain • Shaking chills • Urinary incontinence • Frequency • Gross hematuria • Suprapubic pain OR	Positive urine culture (>10^5 CFU/mL) and dysuria, OR Positive urine culture (>10^5 CFU/mL) and 2 or more of the following: • Fever • Urgency • Flank pain • Urinary incontinence • Shaking chills
			frequency
			2. One of the following: a. ≥10^5 CFU/mL of no more than 2 organisms in a voided urine b. ≥10^2 CFU/mL of any number of organisms in an in/out catheter sample

CVAT, costovertebral angle tenderness.
*Single oral temperature >37.8°C (>100°F) OR repeated oral temperatures >37.2°C (99°F) or rectal temperatures >37.5°C (99.5°F) OR single temperature >1.1°C (2°F) over baseline from any site.
†D'Agata, Loeb, and Mitchell recently stated "The original SHEA (Loeb) criteria were developed for the general NH population and did not take into consideration the unique characteristics of residents with profound cognitive impairment who are nonverbal... fever alone may be adequate evidence to justify antimicrobial initiation for a suspected UTI, so long as there are no additional symptoms (eg, new cough) to suggest an alternative source of infection." Clinicians must be diligent to stop antimicrobials if urine testing is negative.[14]

Mc Geer 1991:

- **Tres dels següents:**
- Febre ≥ 38ºC o calfreds.
- Disúria, polaquiúria o urgència de nova aparició o increment de la prèvia.
- Dolor lumbar o suprapúbic de nov aparició.
- Canvis a les característiques de la orina.
- Canvis a l´estat mental o funciona (inclou incontinència)

Stone 2012: SHEA/CDC

- **Febre o leucocitosi i almenys un:**
- Dolor o sensibilitat a nivell lumbar.
- Dolor suprapúbic
- Hematúria macroscòpica.
- Incontinència de nova aparició o augment de la prèvia.
- Polaquiúria o augment de la freqüència habitual.
- **En absència de febre o leucocitosi s´han de donar dos dels anteriors.**

+ URINOCULTIU positiu

Loeb 2001:
No catèter:
Disúria o febra > 37,9ºC (o > 1,5ºC de Tª habitual) més un dels següents:
Empitjorament d'urgència miccional o aparició nova
Polaquiúria
Dolor suprapúbic
Macrohematúria
Dolor costovertebral
incontinència
Portadors de catèter (SV, SSP…). Almenys 1:
Febra > 37,9ºC (o > 1,5ºC de Tª habitual)
Dolor costovertebral
Calfreds
Delirium

Olsho Lauren EW, et al. Does Adherence to the Loeb Minimum Criteria Reduce Antibiotic Prescribing Rates in Nursing Homes? JAMDA 14 (2013) 309.e1e309.e7

JAMDA 14 (2013) 309.e1–309.e7

JAMDA

journal homepage: www.jamda.com

Original Study

Does Adherence to the Loeb Minimum Criteria Reduce Antibiotic Prescribing Rates in Nursing Homes?

Lauren E.W. Olsho PhD[a,*], Rosanna M. Bertrand PhD[a], Alrick S. Edwards MPH[a], Louise S. Hadden[a], G. Brant Morefield PhD[a], Donna Hurd MSN[a], C. Madeline Mitchell MURP[b], Philip D. Sloane MD, MPH[b,c], Sheryl Zimmerman PhD[b,d]

[a] US Health Division, Abt Associates Inc, Cambridge, MA
[b] Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, Chapel Hill, NC
[c] Department of Family Medicine, University of North Carolina at Chapel Hill, Chapel Hill, NC
[d] School of Social Work, University of North Carolina at Chapel Hill, Chapel Hill, NC

Estudi observacional a 3 mesos.
3381 prescripcions
Carolina del Nord

- **Pell i teixits tous: 42%**
- **Inf. urinàries: 10%**
- **Inf. respiratòries: 1,9%**

Table 3
Prescribing Rates and Loeb Criteria Adherence by Indication in 12 North Carolina Nursing Homes, Overall and by Specific Indication (n = 110,810 resident-days)

	Total Prescribing Rate per 1000 Resident-Days		Percent of Prescriptions Adhering to Loeb	
	Mean	Range Across Study Nursing Homes	Mean, %	Range Across Study Nursing Homes, %
All indications	11.5	5.4–25.9	12.7	4.8–22.0
Urinary tract infection	4.8	1.2–10.9	10.2	0.0–38.9
Respiratory infection	4.5	1.8–10.9	1.9	0.0–6.9
Skin and soft tissue infection	2.2	0.7–4.1	42.7	33.3–100.0

Characteristic	Infectious Episodes[a]			Association of Treatment With Presence of Minimum Criteria OR (95% CI)	
		Minimum Criteria			
	Total (n = 359)	Present (n = 158)	Absent (n = 201)	Unadjusted	Adjusted
Asked about preferences for antimicrobial use[e]	224 (62.9)	100 (63.3)	124 (61.7)	1.12 (0.76–1.65)	NA
Infectious episode					
Type					
Urinary	148 (41.2)	28 (17.7)	120 (59.7)	1 [Referent]	1 [Referent]
Respiratory	104 (29.0)	35 (22.2)	69 (34.3)	2.24 (1.04–4.85)b	2.33 (1.12–4.84)
Febrile	41 (11.4)	32 (20.3)	9 (4.5)	14.79 (4.75–46.08)[c]	14.92 (5.16–43.14)
Skin	66 (18.4)	63 (39.9)	3 (1.5)	95.35 (23.44–387.90)[c]	102.92 (28.49–371.85)
Physician prescriber (vs nurse practitioner)	166 (46.2)	69 (43.7)	97 (48.3)	0.83 (0.54–1.26)	NA
Within 30 days of death	54 (15.0)	28 (17.7)	26 (12.9)	1.66 (0.93–2.96)[c]	NA
Hospitalized[e]	42 (11.8)	23 (14.6)	19 (9.5)	1.60 (0.86–2.97)	NA
Clinical examination within 72 hours	215 (59.9)	108 (68.4)	107 (53.2)	2.20 (1.22–3.97)[c]	NA
Documented proxy discussion[e]	203 (56.7)	96 (60.8)	107 (53.2)	1.34 (0.86–2.11)	NA
Weekend episode	71 (19.8)	27 (17.1)	44 (21.9)	0.71 (0.48–1.04)[c]	NA

Abbreviations: BANS-S, Bedford Alzheimer Nursing Severity–Subscale; NA, not applicable; OR, odd ratio; TSI, Test for Severe Impairment.

- Sospita infecció (66%) només se'n tracten 72%
- D'aquests només cumplien criteris 44%
- Antibiòtic: quinolones; cef 3º G; penicilines; Cef 1º G (<10% tractats amb altres atibiòtics)

SPREAD study

Michel SL, et al. Infection Management and Multidrug-Resistant Organism in Nursing Home Residents Wiht Advanced Dementia. JAMA Intern Med. 2014 October 1; 174(10): 1660–1667.

OBJETIUS DEL TRACTAMENT

Augmentar la supervivència

Millorar la qualitat de vida

The NEW ENGLAND JOURNAL of MEDICINE

CLINICAL PRACTICE

Caren G. Solomon, M.D., M.P.H., *Editor*

Advanced Dementia

Susan L. Mitchell, M.D., M.P.H.

KEY CLINICAL POINTS

ADVANCED DEMENTIA

- Advanced dementia is a leading cause of death in the United States.
- Features include profound memory deficits (e.g., inability to recognize family), minimal verbal communication, loss of ambulatory abilities, the inability to perform activities of daily living, and urinary and fecal incontinence.
- The most common clinical complications are eating problems and infections, and these require management decisions.
- Advance care planning is a cornerstone of care. Treatment decisions should be guided by the goals of care; more than 90% of health care proxies state that patient comfort is the primary goal.
- Observational studies do not show any benefits of tube feeding in persons with advanced dementia, and tube feeding is not recommended.
- Observational studies show several benefits of hospice care. Patients with advanced dementia should be offered palliative and hospice care services if they are available.

QUALITAT DE VIDA

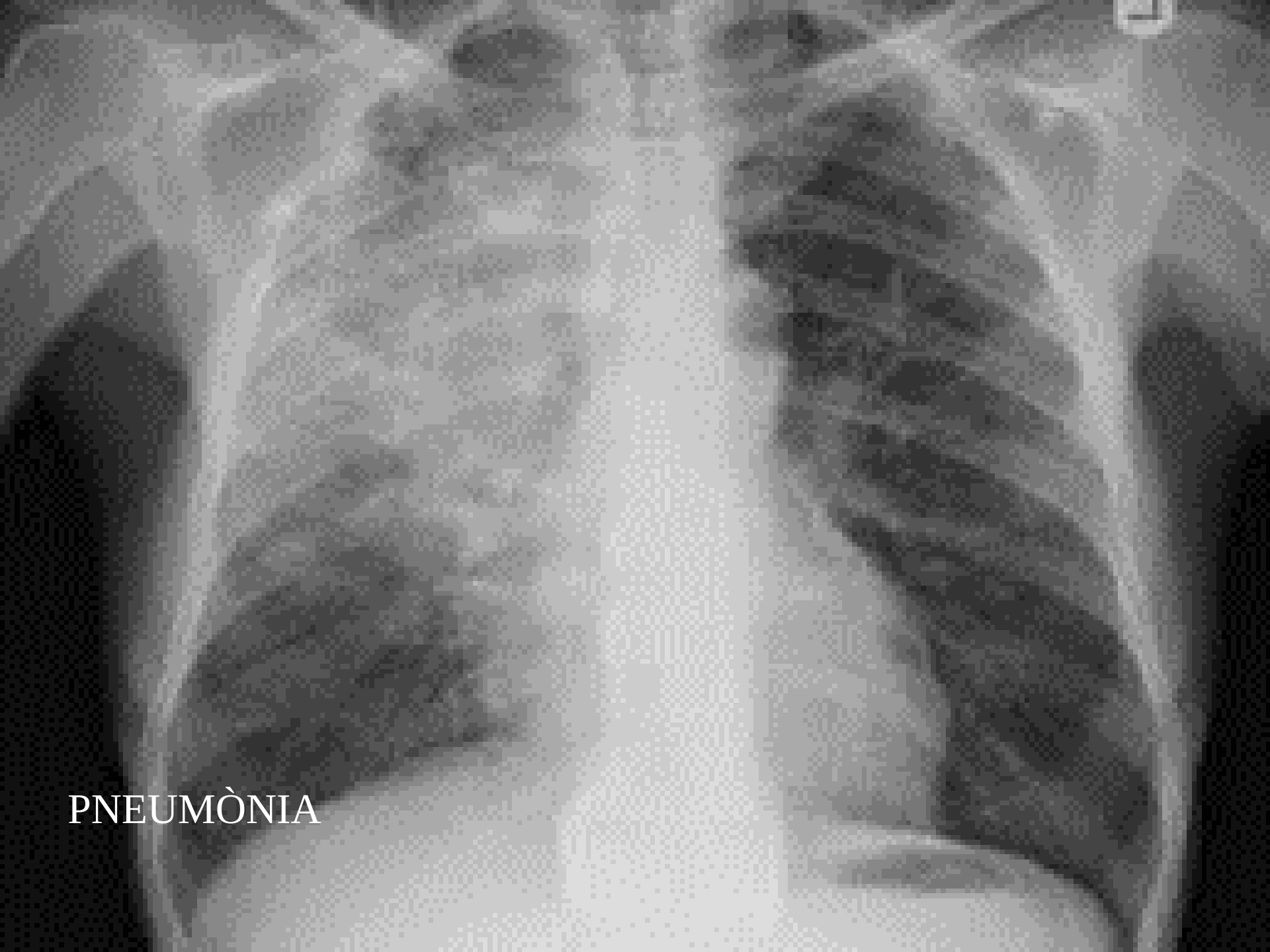
Disconfort derivat de la MALALTIA:

Malestar general
Dispnea
Delirium
Febra
Tos
Dolor
Mucositat

Dinconfort derivat del TRACTAMENT:

ANTIBIÒTIC:
- Efectes GI
- C Difficile
- Multirresistències
- RAM

DERIVACIONS
RESTRICCIONS
CATÈTERS / SONDES
EXPLORACIONS COMPLEMENTÀRIES


PNEUMÒNIA

L’antibioticoterapia oral millora el confort en el final de vida de pacients amb pneumònia.

Van Der Steen JT[1], et al *Discomfort in dementia patients dying from pneumonia and its relief by antibiotics*. Scand J Infect Dis. 2009;41(2):143-51

Pic de disconfort a les 24h d’inici de tractament que va millorant fins el 10è dia. No diferències entre malalts que portàven o no antibiòtic.

van der Maaden *T*[1] ***Prospective Observations of Discomfort, Pain, and Dyspnea in Nursing Home Residents With Dementia and Pneumonia.*** J Am Med Dir Assoc. 2016 Feb;17(2):128-35

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Survival and Comfort After Treatment of Pneumonia in Advanced Dementia

Dr Jane L. Givens, MD, MSCE, **Dr Richard N. Jones, ScD**, **Dr Michele L. Shaffer, PhD**, **Dr Dan K. Kiely, MPH**, and **Dr Susan L. Mitchell, MD, MPH**
Division of Gerontology, Beth Israel Deaconess Medical Center (Drs Givens and Mitchell), and Hebrew SeniorLife Institute for Aging Research (Drs Givens, Jones, and Mitchell and Mr Kiely), Boston, Massachusetts; and Department of Public Health Sciences, Penn State College of Medicine, Hershey, Pennsylvania (Dr Shaffer)

- **Medir el confort després de l'episodi de pneumònia**
  - **Símptomes en els darrers 3 mesos (SM-EOLD)**
  - **Símptomes en la darrera setmana (CA-EOLD)**

Table 2

Characteristics of 225 Suspected Pneumonia Episodes Among Nursing Home Residents With Advanced Dementia

Pneumonia Treatment	Pneumonia Episodes, No. (%)	% Alive 90 Days After Pneumonia Episode	SM-EOLD Score, Mean (SD)	No. (%)		
				Suspected Aspiration	Unstable Vital Signs[a]	Chest Radiograph Obtained
No antimicrobial agent	20/225 (8.9)	32.8	39.4 (4.4)	12 (60.0)	8 (40.0)	6 (30.0)
Oral antimicrobial agent	124/225 (55.1)	64.5	34.0 (8.1)	61 (49.2)	33 (26.6)	105 (84.7)
Intramuscular antimicrobial agent	35/225 (15.6)	56.7	33.7 (7.2)	18 (51.4)	18 (51.4)	26 (74.3)
Intravenous antimicrobial agent or hospitalization	46/225 (20.4)	60.6	30.5 (9.3)	35 (76.1)	26 (56.5)	36 (78.3)

Abbreviation: SM-EOLD, Symptom Management at End-of-Life in Dementia.

[a]Unstable vital signs: respiratory rate greater than 30/min; temperature higher than 33°C; heart rate greater than 125/min; or systolic blood pressure lower than 90 mm Hg.

SUPERVIVÈNCIA:

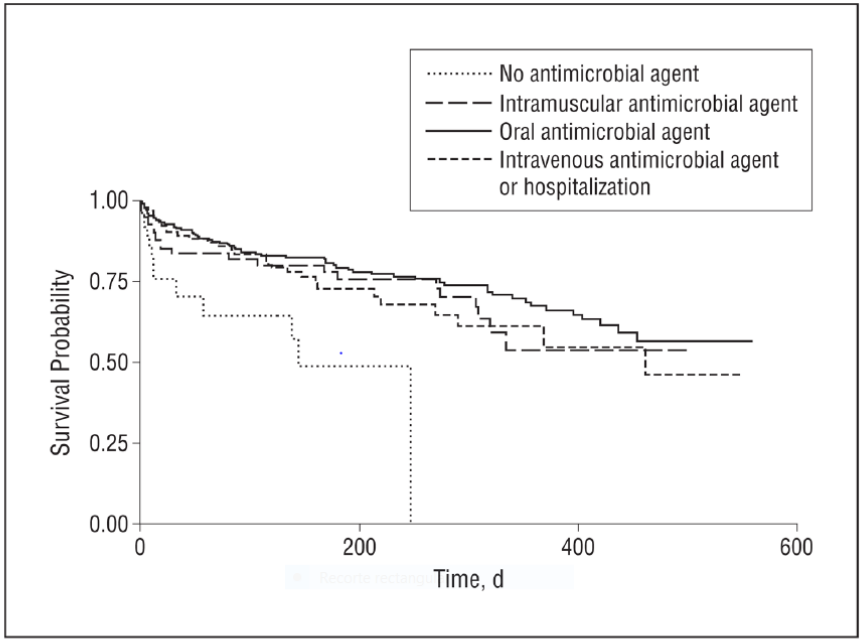

Figure.
Survival after suspected pneumonia episode, by treatment: no antimicrobial agents, oral antimicrobial agents, intramuscular antimicrobial agents, and intravenous antimicrobial agents or hospitalization. Adjusted for age, sex, race, functional status (Bedford Alzheimer Nursing Severity Subscale),23 suspected aspiration, congestive heart failure, hospice referral, chest radiograph obtained, do-not-hospitalize order, and unstable vital signs.

- Es va relacionar la mortalitat amb la decisió de NO tractar i amb les ordres de NO trasllat a hospital.
- **Si tractament antibiòtic en pneumònia: Augment de la s(v)= 273 dies**

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Arch Intern Med. 2010 July 12; 170(13): 1102–1107. doi:10.1001/archinternmed.2010.181.

Survival and Comfort After Treatment of Pneumonia in Advanced Dementia

Dr Jane L. Givens, MD, MSCE, **Dr Richard N. Jones, ScD**, **Dr Michele L. Shaffer, PhD**, **Dr Dan K. Kiely, MPH**, and **Dr Susan L. Mitchell, MD, MPH**
Division of Gerontology, Beth Israel Deaconess Medical Center (Drs Givens and Mitchell), and Hebrew SeniorLife Institute for Aging Research (Drs Givens, Jones, and Mitchell and Mr Kiely), Boston, Massachusetts; and Department of Public Health Sciences, Penn State College of Medicine, Hershey, Pennsylvania (Dr Shaffer)

JAMDA 13 (2012) 376–383

JAMDA

journal homepage: www.jamda.com

Original Study

Mortality Following Nursing Home–Acquired Lower Respiratory Infection: LRI Severity, Antibiotic Treatment, and Water Intake

Kristina L. Szafara PhD [a,*], Robin L. Kruse PhD [b], David R. Mehr MD, MS [b], Miel W. Ribbe MD, PhD [c,d], Jenny T. van der Steen PhD [c,d]

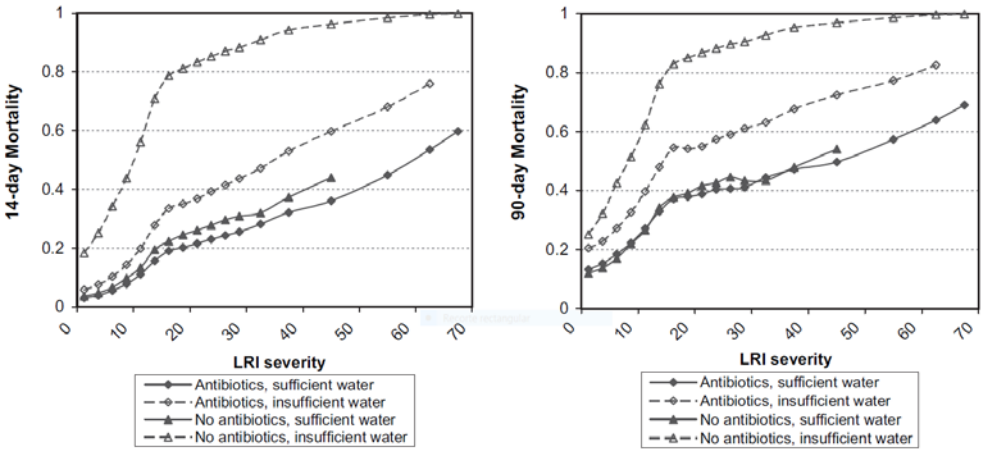


Fig. 1. Predicted 14-day and 90-day mortality by LRI severity, grouped by antibiotic use and water intake.

- La severitat de la infecció respiratòria es relaciona amb la mortalitat als 90 dies.
- L'adequada hidratació en el moment del diagnòstic augmenta la supervivencia, essent les diferències entre antibiòtic si/no insignificants.

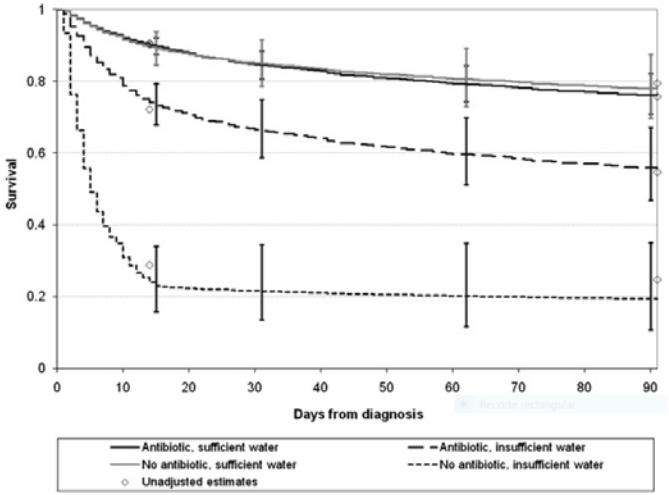
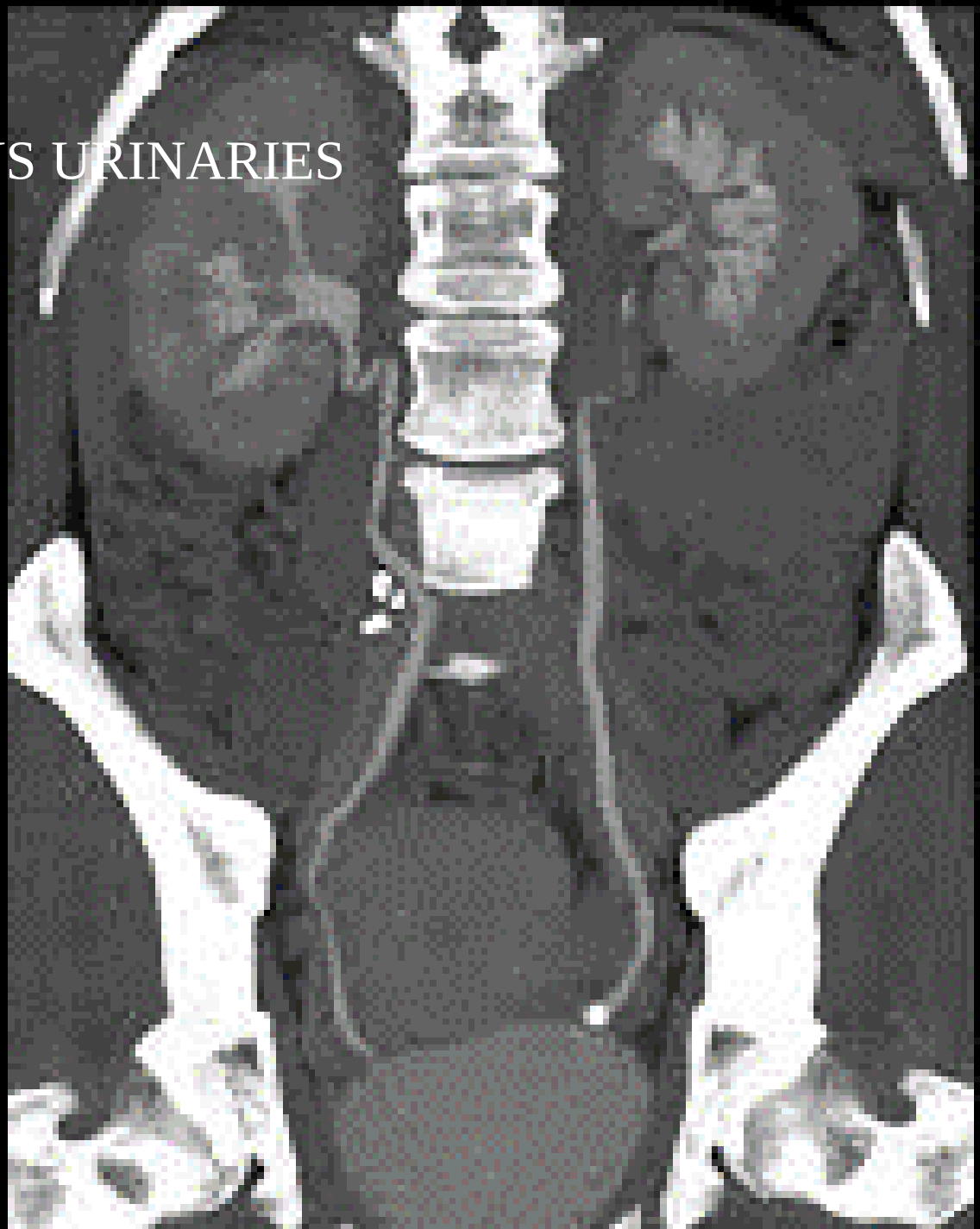


Fig. 2. Predicted 90-day survival grouped by antibiotic use and water intake.

Els beneficis del tractament antibiòtic de la pneumònia en fases evolucionades de la demència no estan clars.

van der Steen JT, et al. Antimicrobial Use in Patients with Dementia: Current Concerns and Future Recommendations CNS Drugs. 28 March 2017

INFECCIONS URINARIES



JAMDA 15 (2014) 133–139

JAMDA

journal homepage: www.jamda.com

Controversies in Long Term Care

Clinical Uncertainties in the Approach to Long Term Care Residents With Possible Urinary Tract Infection

David A. Nace MD, MPH, CMD [a,*], Paul J. Drinka MD, AGSF, FSHEA [b,c], Christopher J. Crnich MD, MS [b,d]

[a] Division of Geriatric Medicine, Department of Medicine, School of Medicine, University of Pittsburgh, Pittsburgh, PA
[b] University of Wisconsin School of Medicine and Public Health, Madison, WI
[c] Medical College of Wisconsin, Milwaukee, WI
[d] William S. Middleton Veterans Administration Medical Center, Madison, WI

- **Prevalença de bacteriúria assimptomàtica en centres de llarga estada és de 15-50%**
- **Antibioticoterapia inapropiada.**
  - **Estudi a Servei urgències Hospitalaries:**
    - » **Possible infecció 14% urinocultiu positiu**
    - » **D'aquest 71% assimptomàtics. Van pendre antibiòtic**

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J Am Geriatr Soc. 2015 December ; 63(12): 2472–2477. doi:10.1111/jgs.13833.

Survival After Suspected Urinary Tract Infection in Individuals with Advanced Dementia

Alyssa B. Dufour, PhD[*,†], **Michele L. Shaffer, PhD**[‡,§], **Erika M.C. D'Agata, MD, MPH**[‖], **Daniel Habtemariam, BA**[*], and **Susan L. Mitchell, MD, MPH**[*,†]

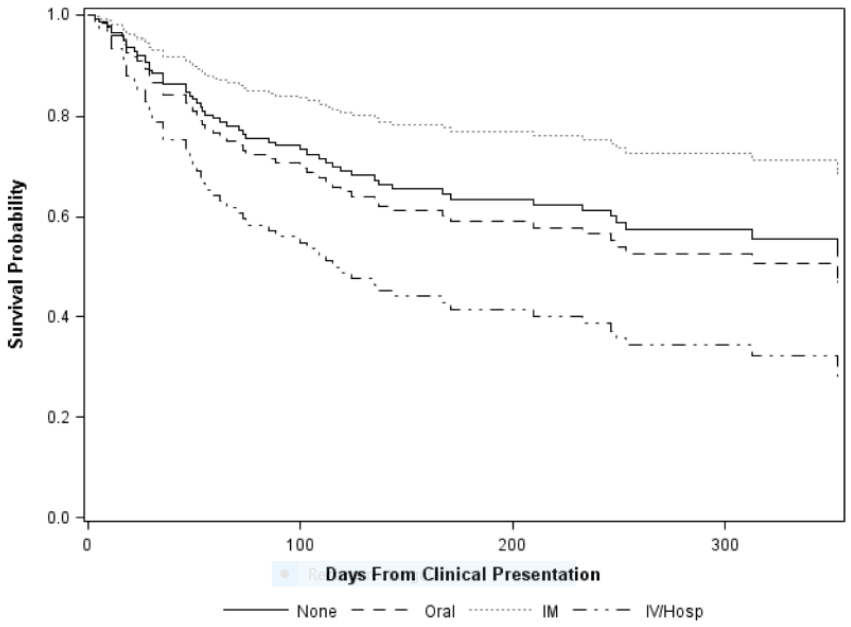


Figure 1.
Survival in days after suspected urinary tract infection, stratified according to treatment: no antimicrobials (solid line), oral antimicrobials (dashed line), intramuscular antimicrobials (dotted line), and intravenous antimicrobials or hospitalization (dash-dotted line). Model adjusted for functional status (Bedford Alzheimer's Nursing Severity—Subscale Score), highest recorded temperature (<99°F, 99–101°F, >101°F), and mental status change.

-Es va iniciar antibiòtic al 75% de malalts amb sospita d'ITU

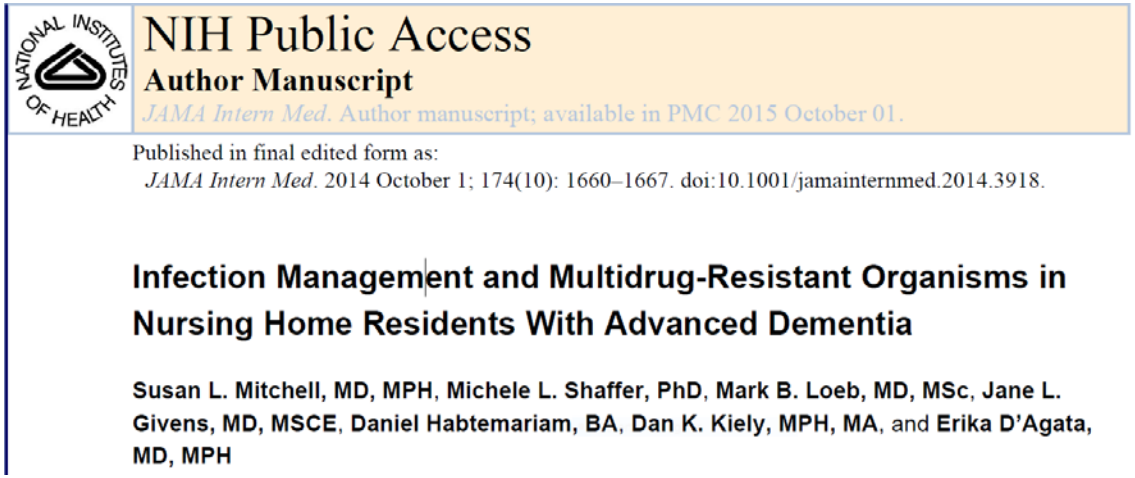
59% oral
9% ims
6% ev

-23% èxitus en <123d

-NO diferències en la s(v) en tractament oral, ims, no antibiòtic.

Gèrmens multiresistents: Un problema de salut pública

- **S'estima que un 60% de residents a Nursing homes estan colonitzats per germenes MR. Els malalts amb demència la probabilitat d'estar colonitzat es triplica.**



Published in final edited form as:
JAMA Intern Med. 2014 October 1; 174(10): 1660–1667. doi:10.1001/jamainternmed.2014.3918.

Infection Management and Multidrug-Resistant Organisms in Nursing Home Residents With Advanced Dementia

Susan L. Mitchell, MD, MPH, Michele L. Shaffer, PhD, Mark B. Loeb, MD, MSc, Jane L. Givens, MD, MSCE, Daniel Habtemariam, BA, Dan K. Kiely, MPH, MA, and **Erika D'Agata, MD, MPH**

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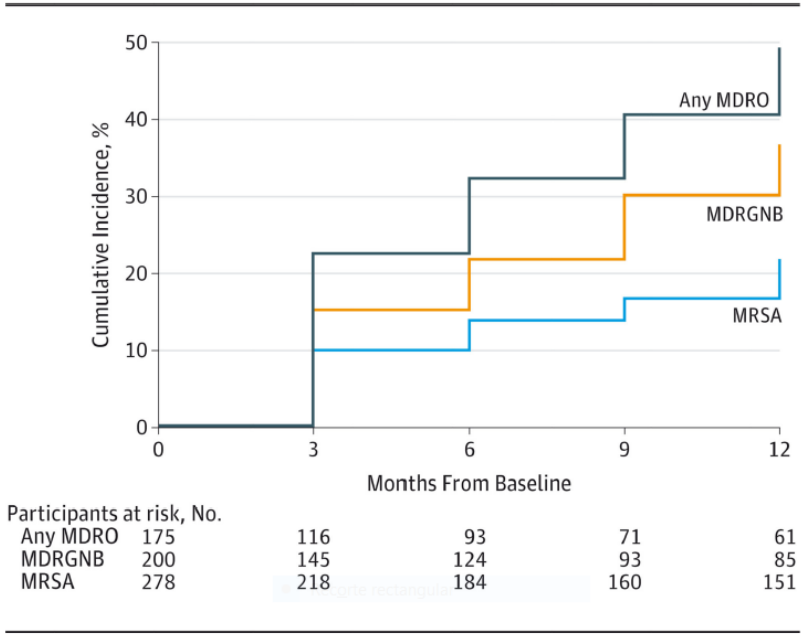

Figure.
Cumulative Incidence Rates of Resident Acquisition of Drug-Resistant Organisms During the Study Period
MDRGNB indicates multidrug-resistant gram-negative bacteria; MDRO indicates multidrug-resistant organism; MRSA, methicillin-resistant *Staphylococcus aureus*; VRE, vancomycin-resistant enterococci. "Any MDRO" includes MDGRN, MRSA, or VRE. All residents were free of all 3 types of MDROs at baseline. Only 2 residents acquired VRE over the 12 months of the study.

- Es relaciona amb: Hospitalització en els darrers 90 dies; Portadors de Sonda Foley; Quinolones i cefalosporines de 3º-4ºG
- Als 12 m 67% colonitzats

Com decidir?

Article

Dementia
2014, Vol 13(1) 96–110

DOI: 10.1177/1471301212450538
dem.sagepub.com
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Palliative care services for people with dementia: A synthesis of the literature reporting the views and experiences of professionals and family carers

Mareeni Raymond, Alex Warner, Nathan Davies and Steve Iliffe
University College London, UK

End-of-life issues in advanced dementia

Part 1: goals of care, decision-making process, and family education

Marcel Arcand MD MSc FCMF

Figure 1. Ideal end-of-life decision making when patients cannot participate

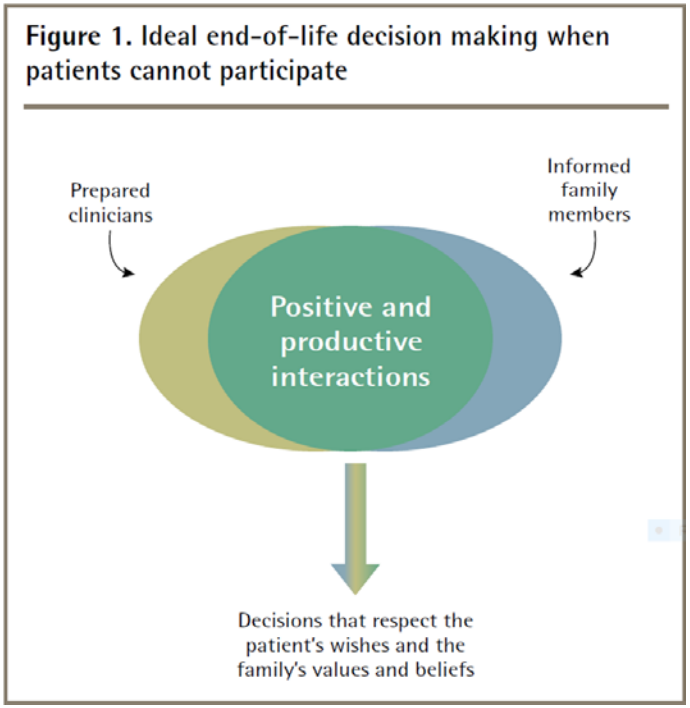
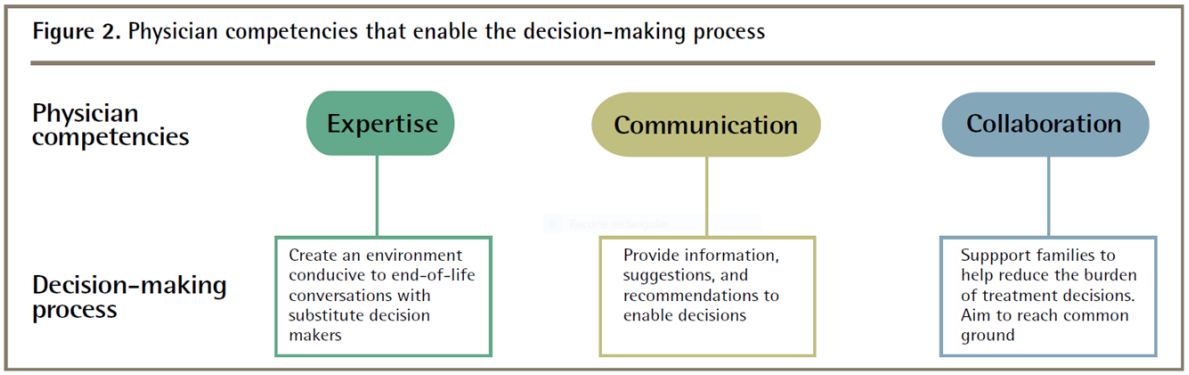


Figure 2. Physician competencies that enable the decision-making process



Multidisciplinar

Dificultats en el diagnòstic

TRACTAMENT:
Antibiòtic i/o simptomàtic

CONCLUSIONS:

- **Ser acurats en el diagnòstic. Valorar contemporitzar segons la clínica.**
- **En les infeccions respiratòries el tractament antibiòtic augmenta la supervivencia tot i que no queda clar que sigui un tractament de confort o que millori els símptomes.**
- **Valorar les conseqüències del tractament antibiòtic**
  - Confort/desitjos i expectatives de paciente i familia. Estem allargant el procés de mort?
  - Problema de salut pública. Germens MR.
- **Tractar no només es posar antibiòtic**
  - Importància de la hidratació
  - Tractament simptomàtic
- **Treball multidisciplinar.**
- **Accés a unitats especialitzades**

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