FIBRILLAZIONE NELL’ANZIANO, AL DI LA’ DI UNA SEMPLICE ARITMIA

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Syncope Unit – Centro Ipertensione Geriatria e Terapia intensiva Geriatrica Firenze
Table 8  Cardiovascular and other conditions independently associated with atrial fibrillation

<table>
<thead>
<tr>
<th>Characteristic/comorbidity</th>
<th>Association with AF</th>
</tr>
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<tbody>
<tr>
<td>Genetic predisposition (based on multiple common gene variants associated with AF)(^{64})</td>
<td>HR range 0.4–3.2</td>
</tr>
<tr>
<td>Older age(^{19})</td>
<td></td>
</tr>
<tr>
<td>50–59 years</td>
<td>HR:</td>
</tr>
<tr>
<td>60–69 years</td>
<td>1.00 (reference)</td>
</tr>
<tr>
<td>70–79 years</td>
<td>4.98 (95% CI 3.49–7.10)</td>
</tr>
<tr>
<td>80–89 years</td>
<td>7.35 (95% CI 5.28–10.2)</td>
</tr>
<tr>
<td></td>
<td>9.33 (95% CI 6.68–13.0)</td>
</tr>
</tbody>
</table>
Incidence rate of AF by age-group and year of diagnosis (the UK Clinical Practice Research Datalink, a primary care database – GOLD – N=57 818 patients with incident AF)
**Recommendations for screening for atrial fibrillation**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Class&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Level&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Ref&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunistic screening for AF is recommended by pulse taking or ECG rhythm strip in patients &gt;65 years of age.</td>
<td>I</td>
<td>B</td>
<td>130, 134, 155</td>
</tr>
<tr>
<td>Systematic ECG screening may be considered to detect AF in patients aged &gt;75 years, or those at high stroke risk.</td>
<td>IIb</td>
<td>B</td>
<td>130, 135, 157</td>
</tr>
</tbody>
</table>

<sup>a</sup> Class

<sup>b</sup> Level

<sup>c</sup> Ref
Frailty syndrome: an emerging clinical problem in the everyday management of clinical arrhythmias: results of the European Heart Rhythm Association survey

Comorbidities most frequently associated to the frailty syndrome

**Afib**: atrial fibrillation; **Brady-Tachy**: bradycardia tachycardia syndrome; **CAD**: coronary artery disease; **CRF**: chronic renal failure
FIBRILLAZIONE NELL’ANZIANO, AL DI LA’ DI UNA SEMPLICE ARITMIA

Ma chi è l’anziano fragile?
Definitions

**Comorbidity definition**
the presence of one or more additional diseases or disorders co-occurring with a primary disease (eg. HF) or disorder.

**Disability definition**
the loss of autonomy and the consequent dependence in one or more global activities of daily living.

**Frailty definition**
Definitions

**Comorbidity definition**
the presence of one or more additional diseases or disorders co-occurring with a primary disease (eg. HF) or disorder.

**Disability definition**
the loss of autonomy and the consequent dependence in one or more global activities of daily living.

**Frailty definition**
Fragilità: definizione

- Sindrome multifattoriale, determinata dalla riduzione della fisiologica riserva funzionale e della capacità di resistere a eventi stressanti ambientali (capacità di omeostasi)
- Comporta un aumentato rischio di eventi clinici: disabilità, ospedalizzazione, istituzionalizzazione, morte
- Condizione complessa e dinamica, della quale si sono proposti numerosi modelli
Definizione operativa di fragilità in popolazione anziana generale: Cardiovascular Health Study

1. Forza (handgrip) nel quintile inferiore
2. Velocità del cammino nel quintile inferiore
3. Perdita di peso non intenzionale $\geq 4,5$ kg nell’ultimo anno
4. Facile esauribilità
5. Livello di attività fisica nel quartile inferiore

PHENOTYPE FRAILTY INDEX
Fragile: $\geq 3$ componenti
Intermedio (prefragile): 1 o 2 componenti
Non fragile (robusto): 0 componenti

Short Physical Performance Battery (SPPB)

**Test dell’equilibrio**

- **Posizione piedi uniti**
  - tempo: ___ sec
  - per 10 sec → 1 punto
  - <10 secondi → 0 punti

- **Posizione semitandem**
  - tempo: ___ sec
  - per 10 sec → 1 punto
  - <10 secondi → 0 punti

- **Posizione tandem**
  - tempo: ___ sec
  - per 10 sec → 2 punti
  - 3-9.9 sec → 1 punto
  - <3 sec → 0 punti

**Test della marcia**

- Tempo per percorrere 4 metri di passo normale: ___ sec
- (tempo migliore di 2 prove)
- <4.8 sec → 4 punti
- 4.8-6.2 sec → 3 punti
- 6.3-8.7 sec → 2 punti
- >8.7 sec → 1 punto
- incapace → 0 punti

**Test della sedia**

- Capace
  - Alzarsi e sedersi per 5 volte più velocemente possibile a braccia incrociate
  - <11.2 sec → 4 punti
  - 11.2-13.7 sec → 3 punti
  - 13.8-16.7 sec → 2 punti
  - 16.8-60 sec → 1 punto
  - >60 sec o incapace → 0 punti

**Punteggio totale: 0-12**

Disability, more than multimorbidity, was predictive of mortality among older persons aged 80 years and older.
Frailty concept: two 78-year-old patients with severe degenerative mitral valve regurgitation and comparable Logistic Euro-Score (12%)
Relationship between comorbidity, disability and frailty according to the Phenotype Frailty Index

IN QUESTO ANTICO OSPEDALE NEI PRIMI ANNI DEL MILLECINQUECENTO

LEONARDO DA VINCI

GENIO UNIVERSEALE DEL RINASCIMENTO
ESEGUÌ LE DISSEZIONI CON CUI DAVA AVVIO ALLO STUDIO AUTOPTICO
SISTEMATICO DELLA ANATOMIA UMANA

E QUESTO VECCHIO, DI POCHE ORE INNANZI LA SUA MORTE, MI DISE LUI PASSARE I CENTO ANNI,
E CHE NON SI SENTIVA ALCUN MANCAMENTO NE LA PERSONA, ALTRO CHE DEBOLEZZA;
E COSÌ STANDOSI A SEDERE SOPRA UNO LETTO NELLO SPEDALE DI SANTA MARIA NOVA DI FIRENZE,
SANZA ALTRO MOVIMENTO O SEGNO D'ALCUNO ACCIDENTE, PASSÒ DI QUESTA VITA.
E IO NE FECI NOTOMIA, PER VEDERE LA CAUSA DI SÌ DOLCE MORTE.

LA FONDAZIONE SANTA MARIA NUOVA ONLUS POSE NELL'ANNO 2017
.... MS, 96 aa; Non assume farmaci
Dal 1948 non perde un angelus....
NOACs: main outcomes in AF

**Apixaban**
ARISTOTLE

**Dabigatran 150mg**
RE-LY

**Edoxaban 60mg**
ENGAGE AF-TIMI 48

**Rivaroxaban**
ROCKET AF

**Combined (random)**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Stroke/SE RR (95% CI)</th>
<th>Major bleeding RR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apixaban</td>
<td>0.80 (0.67–0.95)</td>
<td>0.71 (0.61–0.81)</td>
</tr>
<tr>
<td>Dabigatran 150mg</td>
<td>0.66 (0.53–0.82)</td>
<td>0.94 (0.82–1.07)</td>
</tr>
<tr>
<td>Edoxaban 60mg</td>
<td>0.88 (0.75–1.02)</td>
<td>0.80 (0.71–0.90)</td>
</tr>
<tr>
<td>Rivaroxaban</td>
<td>0.88 (0.75–1.03)</td>
<td>1.03 (0.90–1.18)</td>
</tr>
<tr>
<td>Combined (random)</td>
<td>0.81 (0.73–0.91)</td>
<td>0.86 (0.73–1.00)</td>
</tr>
</tbody>
</table>

Modified from Ruff et al. Lancet 2014;383:955-62
Effect of New Oral Anticoagulants on Prescribing Practices for Atrial Fibrillation in Older Adults

Quarterly trend in anticoagulant use (N=6568; age ≥75 years) (the Clinical Investigation Data Exploration Repository - CIDER, Washington University)

NOAC use (%)

Warfarin use (%)

R = 0.87,
p <0.001

R = -0.16,
p = 0.50

<45%

Anticoagulant use (%)

R = 0.68,
p = 0.001

JAGS 2017
Many AF patients present at older age (e.g. >75 or >80 years)

There are no studies suggesting that cardiovascular risk reduction is less effective in these ‘elderly’ AF patients than in younger patients

Rather, age is one of the strongest predictors/risk factors for ischaemic stroke in AF

Good data are available to support the use of anticoagulants in older patients

Elderly AF patients are at higher risk of stroke and, thus, are more likely to benefit from OAC than younger patients, and yet OAC is still underutilized in the elderly
Frailty syndrome: an emerging clinical problem in the everyday management of clinical arrhythmias: results of the European Heart Rhythm Association survey

Reasons not to prescribe OAs to a frail patient with AF (light green bars indicate responses that are in favour of the use of OAs)

- Age: 11.4%
- Prior bleed: 48.6%
- Bleeding risk: 45.7%
- Active bleeding: 65.7%
- Refusal: 34.3%
- Falls: 28.6%
- Anticoagulants: 14.3%
- Comorbidities: 17.1%
- Dementia: 40%
- Compliance: 28.6%
- Assistance: 11.4%
- No reasons: 14.3%
- As much as possible: 17.1%
Anticoagulant use in 682 hospitalized patients ≥80 years with AF/AFI (Age: 85.9; 3 academic hospitals; Montreal, Quebec; 2012-2013)

The most common reasons for not prescribing an OA:
1. Hx of bleeding (15.5%)
2. Active bleeding (15.5%)
3. Risk of falls (14%)
4. Patient refusal (8.7%)
5. No justification provided (15%)
All AF patients with non-sex-related CHA₂DS₂-VASc stroke risk factor should be considered for OAC therapy, irrespective of their frailty status.

Frail AF patients require a detailed assessment of their baseline stroke/bleeding risk profile and consideration of their personal values/preferences with regards to AF management.

Frail AF patients taking OAC need a frequent, regular clinical follow-up for treatment effects monitoring and stroke/bleeding risk re-assessment.

The advantages of NOACs relative to VKAs are likely consistent in frail and non-frail AF patients, but frail AF patients may have a greater benefit from NOACs owing to a higher absolute risk of TE events.

Aspirin should not be used for stroke prevention in frail AF patients, since it is essentially ineffective and associated to similar risk of bleeding compared to NOACs/VKAs.
The available data support the use of rate and rhythm control interventions, including PMs and catheter ablation, without justification to discriminate by age group.

Patients at older age may present with multiple comorbidities. Such conditions may limit HRQL more than AF.

Impairment of renal and hepatic function, and polypharmacy make drug interactions and ADRs more likely.

Integrated AF management and careful adaptation of drug dosing seem reasonable to reduce the complications of AF therapy in such patients.
Interventions Performed or Planned at Enrollment by Age Group in the EORP-AF General Pilot Registry
(<75 years - N=2068; age: 63±9 y; >75 years - N=1051; age: 81±5 y)

ECV / PCV: External / Pharmacological CV
Cat. Abl.: catheter ablation of AF
PM: pacemaker implantation

Fumagalli S, JACC: CE 2015
Rate vs. rhythm control and adverse outcomes among European patients with atrial fibrillation

the EORP-AF General Pilot Registry Investigators

Kaplan–Meier curves for all-cause death according to baseline strategy
(Rate control – 73 y, women: 40%; Rhythm control – 66 y, women: 34%)

HR=2.83,
95%CI=1.14-7.05
P=0.026

After adjustment for: Age, previous TIA, CHF, CKD, diabetes, physical activity

N=102/1036 (9.8%)
N=9/355 (2.5%)

Purmah Y,
Europace 2018
Risks of dementia in stroke-free patients diagnosed with atrial fibrillation: data from a population-based cohort

The cumulative incidence of dementia in the overall population of the Korean NHIS-Senior (2005-13; AF-free - 71 years, FU: 85 m; AF - 72 years; FU: 86 m)

Overall population

Cumulative incidence of dementia

Incidence

100 person-years

AF status

AF

AF-free

Years after enrolment

HR=1.63

95%CI: 1.54–1.72

N=2522/10435

24.4%

N=36322/252176

14.4%

Kim D, EHJ 2019
Atrial fibrillation and physical function decline in an Italian elderly population: the InCHIANTI Study experience

SPPB trends by presence of AF
(N=267; AF prevalence: 4.9%; age - AF: 81±6 vs. NO AF: 77±6 years, p<0.01)

\[ \beta = -1.369 \pm 0.507; \quad p=0.007 \]

BL: 1998
FU-1 / FU-2: 3 / 6 years

Fumagalli S, Marchionni N, Ferrucci L, EHRA 2017
FIBRILLAZIONE NELL’ANZIANO, AL DI LA’ DI UNA SEMPLICE ARITMIA

Perchè I DOAC nell’anziano fragile?
L’ETNA-AF Global è il più ampio Registro con un singolo DOAC
analizzerà l’utilizzo, la sicurezza e l’efficacia di edoxaban nella normale pratica clinica
Obiettivo primario: valutare la sicurezza di edoxaban

- L’ETNA-AF è stato disegnato per valutare in un periodo di 4 anni l’insorgenza, la durata e la severità di:
  - Sanguinamenti, incluse le emorragie intracraniche
  - Eventi avversi correlati al farmaco
  - Mortalità cardiovascolare e mortalità per tutte le cause

- Obiettivi secondari:
  - Ictus, TIA, eventi embolici sistemici, eventi cardiovascolari maggiori (MACE)
  - Eventi tromboembolici venosi
  - SCA, ospedalizzazioni per patologie cardiovascolari, compliance al trattamento
First 1-year follow-up snapshot analysis of over 12,500 AF patients treated with edoxaban in routine clinical practice: ETNA-AF-Europe

Evidence from real-world studies has demonstrated the safety of different NOACs in routine care; moreover, real-world data are currently emerging for edoxaban and will complement the findings from the randomised trials\(^1-3\).

ETNA-AF-Europe (clinicaltrials.gov: NCT02944019) aims to evaluate the risk-benefit profile of edoxaban in unselected AF patients in routine clinical practice\(^4\).

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ETNA-AF-Europe is a multinational, multicentre, observational, post-authorisation, safety study conducted in 825 sites in 10 European countries (Austria, Belgium, Germany, Ireland, Italy, The Netherlands, Portugal, Spain, Switzerland and United Kingdom).

A total of 13,980 patients were enrolled, and will be followed for up to 4 years.

The ETNA-AF-Europe snapshot that was used for this analysis was executed on 22 April 2019.

ETNA-AF Europe: Risultati al primo anno di follow up

Safety events

Stroke events

Mortality

Net clinical benefit, adjusted for the risk of subsequent death, of OACs vs no OACs according to different age groups (the PREFER in AF)

VKAs or NOACs led to a 36% risk reduction of TE events vs. antiplatelet or no treatment; notably, OACs did not increase the risk of major bleeding compared to antiplatelet therapy.
Edoxaban Versus Warfarin in Atrial Fibrillation Patients at Risk of Falling

ENGAGE AF–TIMI 48 Analysis

Absolute Risk Reduction of HD Edoxaban Regimen Compared With Warfarin in Patients at Increased Versus Not at Increased Fall Risk

- Hemorrhagic S: NNT 157 vs. 500
- ICH: NNT 57 vs. 257
- Bleed Life-Threatening: NNT 94 vs. 323
- All-Cause Death: NNT 152 vs. 293

Steffel J, 2016
Clinical Outcomes and History of Fall in Patients with Atrial Fibrillation Treated with Oral Anticoagulation: Insights From the ARISTOTLE Trial

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Fall(s) Within 1 Year</th>
<th>P-Value</th>
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<tbody>
<tr>
<td></td>
<td>Yes (n = 753)</td>
<td>No (n = 15,738)</td>
</tr>
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<td>Age, median (25th, 75th), years</td>
<td>75 (67, 79)</td>
<td>70 (63, 76)</td>
</tr>
<tr>
<td>Age ≥75 years, n (%)</td>
<td>379 (50.3%)</td>
<td>4787 (30.4%)</td>
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<td>Female sex, n (%)</td>
<td>357 (47.4%)</td>
<td>5438 (34.6%)</td>
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<td>BMI, median (25th, 75th), kg/m²</td>
<td>29.1 (25.6, 33.8)</td>
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**CHA2DS2-VASC score, mean (SD)**  
4.19 (1.65)  
3.43 (1.51)  
<.001

Prior stroke, TIA, SE  
28.3%  
20.9%  
<.001

Prior bleeding  
35.1%  
16.0%  
<.001

753 patients with vs 15738 without history of falling
Clinical Outcomes and History of Fall in Patients with Atrial Fibrillation Treated with Oral Anticoagulation: Insights From the ARISTOTLE Trial

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<td>16.0%</td>
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Intracranial bleeding

<table>
<thead>
<tr>
<th></th>
<th>Apixaban Rattle</th>
<th>Warfarin Rattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of falls</td>
<td>0.33 (2)</td>
<td>1.69 (10)</td>
</tr>
<tr>
<td>No history of falls</td>
<td>0.32 (43)</td>
<td>0.78 (103)</td>
</tr>
</tbody>
</table>

Subdural bleeding

<table>
<thead>
<tr>
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<th>Warfarin Rattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of falls</td>
<td>0.00 (0)</td>
<td>0.85 (5)</td>
</tr>
<tr>
<td>No history of falls</td>
<td>0.07 (9)</td>
<td>0.21 (27)</td>
</tr>
</tbody>
</table>

753 patients with vs 15738 without history of falling
Effectiveness and safety of non-vitamin K antagonist oral anticoagulants in octogenarian patients with non-valvular atrial fibrillation

Hyue Mee Kim¹,², Eue-Keun Choi¹*, Chan Soon Park¹, Myung-Jin Cha¹, Seo-Young Lee¹, Joon-Myung Kwon³, Seil Oh¹

<table>
<thead>
<tr>
<th>Event</th>
<th>No. of patients</th>
<th>NOACs (100 person-years)</th>
<th>WFR</th>
<th>Hazard ratio* (95% CI)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thromboembolism</td>
<td>687</td>
<td>5 (1.84)</td>
<td>14 (2.71)</td>
<td>0.134 (0.038-0.479)</td>
<td>0.002</td>
</tr>
<tr>
<td>Major bleeding</td>
<td>687</td>
<td>4 (1.48)</td>
<td>14 (2.72)</td>
<td>0.110 (0.024-0.493)</td>
<td>0.001</td>
</tr>
<tr>
<td>GI bleeding</td>
<td>687</td>
<td>3 (1.1)</td>
<td>6 (1.17)</td>
<td>0.374 (0.047-2.949)</td>
<td>0.347</td>
</tr>
<tr>
<td>ICH</td>
<td>687</td>
<td>1 (0.37)</td>
<td>5 (0.97)</td>
<td>0.024 (0.002-0.350)</td>
<td>0.006</td>
</tr>
<tr>
<td>All-cause death</td>
<td>687</td>
<td>7 (2.57)</td>
<td>18 (3.50)</td>
<td>0.298 (0.108-0.824)</td>
<td>0.020</td>
</tr>
</tbody>
</table>
Effectiveness and safety of non-vitamin K antagonist oral anticoagulants in octogenarian patients with non-valvular atrial fibrillation

Hyue Mee Kim, Eue-Keun Choi, Chan Soon Park, Myung-Jin Cha, Seo-Young Lee, Joon-Myung Kwon, Seil Oh

A. Thromboembolism

B. Major bleeding

C. All-cause death
Effectiveness and safety of non-vitamin K antagonist oral anticoagulants in octogenarian patients with non-valvular atrial fibrillation

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<tr>
<td><strong>Conclusion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thromboembolism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-label use</td>
<td>1 (0.98)</td>
<td>14 (2.72)</td>
<td>0.173 (0.041-1.455)</td>
<td>0.106</td>
</tr>
<tr>
<td>Under-dosed use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major bleeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-label use</td>
<td>3 (1.82)</td>
<td>14 (2.72)</td>
<td>0.169 (0.034-0.833)</td>
<td>0.029</td>
</tr>
<tr>
<td>Under-dosed use</td>
<td>1 (1.08)</td>
<td>14 (2.72)</td>
<td>0.144 (0.017-1.205)</td>
<td>0.074</td>
</tr>
<tr>
<td>All-cause death</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-label use</td>
<td>6 (3.59)</td>
<td>18 (3.50)</td>
<td>0.427 (0.146-1.243)</td>
<td>0.119</td>
</tr>
<tr>
<td>Under-dosed use</td>
<td>1 (1.08)</td>
<td>18 (3.50)</td>
<td>0.126 (0.015-1.036)</td>
<td>0.054</td>
</tr>
</tbody>
</table>
The Effect of Bleeding Risk and Frailty Status on Anticoagulation Patterns in Octogenarians With Atrial Fibrillation: The FRAIL-AF Study

Anticoagulant use in 682 hospitalized patients ≥80 years with AF/AFib (Age: 85.9; 3 academic hospitals; Montreal, Quebec; 2012-2013)

- 374 (54.8%) No OA
- 207 (30.4%) VKA
- 98 (14.4%) NOAC
- 3 (0.4%) LMWH

The most common reasons for not prescribing an OA:
1. Hx of bleeding (15.5%)
2. Active bleeding (15.5%)
3. Risk of falls (14%)
4. Patient refusal (8.7%)
5. No justification provided (15%)
Clinical characteristics of patients with bleeding (year 2015; people potentially referring to the ED: N=3.000.000)

- All bleeding – N=1977
  - Bleeding due to NOAC – N=15
    - Bleeding Genitourinary: 5
    - Gastrointestinal: 2
    - ICH: 5
    - Mixed: 3
    - Age: 77±11 years
    - CHA2DS2-VASc: 4
    - HAS-BLED: 2

- All other accesses – N=95993
  - Hospitalization – N=11/15 (73%)
  - Mortality – 3/15 (20%)
GLF = ground-level fall and tICH = traumatic intracranial hemorrhage and taking and antiplatelet or anticoagulants.
Conclusion: There is a low incidence of clinically significant tICH with a ground-level fall in head trauma in patients taking an anticoagulant or antiplatelet medication. There was no statistical difference in rate of tICH between antiplatelet and anticoagulants, which is unanticipated and counterintuitive as most literature and teaching suggests a higher rate with anticoagulants. A larger data set is needed to determine if small differences between the groups exist.

Deaths

|                | Antiplatelet Treatment,\n| n = 668 (71.1\%) | Anticoagulation Treatment,\n| n = 180 (19.2\%) | Combined Treatment,\n| n = 91 (9.7\%) | p-value* |
|----------------|----------------------------|----------------------------|
| Within 7 days  | 8 (1.2)                    | 0                          | 0                          | 0.34 |
| Within 30 days | 23 (3.4)                   | 3 (1.7)                    | 4 (4.4)                    | 0.35 |
| tICH on CT     | 29 (4.3)                   | 3 (1.7)                    | 1 (1.1)                    | 0.13 |

Data are reported as n (%).
ICU = intensive care unit; LOC = loss of consciousness; tICH = traumatic intracranial hemorrhage.
*Chi-square or exact test analysis.
FIBRILLAZIONE NELL’ANZIANO,
AL DI LA’ DI UNA SEMPLICE ARITMIA

Come ci comportiamo?
### Appropriateness of oral anticoagulant therapy prescription and its associated factors in hospitalized older people with atrial fibrillation

Carlotta Franchi\(^1\), Stefania Antoniazzi\(^2,3\), Marco Proietti\(^4\), Alessandro Nobili\(^4\), Pier Mannuccio Mannucci\(^5\), and on behalf of the SIM-AF Collaborators\(^6\)

<table>
<thead>
<tr>
<th></th>
<th>Patients with OAC N (%)</th>
<th>Patients without OAC N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>221</td>
<td>107</td>
</tr>
<tr>
<td><strong>APPROPRIATE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) CHA(_2)DS(_2)-VASc (\geq 1) (men) and (\geq 2) (women) but with contraindication for OAC</td>
<td>153 (69.2)</td>
<td>19 (18)</td>
</tr>
<tr>
<td>b) Dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dabigatran</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Rivaroxaban</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Apixaban</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Edoxaban</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Warfarin</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>Acenocoumarol</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Appropriateness of oral anticoagulant therapy prescription and its associated factors in hospitalized older people with atrial fibrillation

Table 3
Results from univariate and multivariable logistic regression analyses for the appropriateness of oral anticoagulant prescribing

<table>
<thead>
<tr>
<th></th>
<th>OR</th>
<th>95% CI</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Univariate analysis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (year)</td>
<td>0.97</td>
<td>0.94–1.00</td>
<td>0.030</td>
</tr>
<tr>
<td>History of falls</td>
<td>0.50</td>
<td>0.28–0.89</td>
<td>0.018</td>
</tr>
<tr>
<td>BMI (kg m⁻²)</td>
<td>1.07</td>
<td>1.01–1.12</td>
<td>0.020</td>
</tr>
<tr>
<td><strong>BMI categories</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight</td>
<td>0.29</td>
<td>0.06–1.47</td>
<td>0.136</td>
</tr>
<tr>
<td>Normal weight (ref.)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Overweight</td>
<td>1.69</td>
<td>1.02–2.82</td>
<td>0.043</td>
</tr>
<tr>
<td>Obesity</td>
<td>1.79</td>
<td>0.87–3.66</td>
<td>0.114</td>
</tr>
</tbody>
</table>
Conclusions: The prevalence of frailty in hospitalized elderly patients with AF is high, and the use of OAC is low in these patients. Frail elderly are significantly less likely to receive OAC.
Clinical frailty is independently associated with non-prescription of anticoagulants in older patients with atrial fibrillation

The proportion of individuals not taking anticoagulants (black) compared with those taking anticoagulants (white), by Clinical Frailty Scale, CHA\textsubscript{2}DS\textsubscript{2}-VASc and HAS-BLED scores (N=419; anticoagulated No/Yes: 215/204)

Anticoagulated
Yes – Frailty: 52.5%
No – Frailty: 81.4%
P<0.001

Anticoagulated
Yes – CHA\textsubscript{2}DS\textsubscript{2}-VASc: 5
No – CHA\textsubscript{2}DS\textsubscript{2}-VASc: 4
P<0.001

Anticoagulated
Yes – Age: 83
No – Age: 87
P<0.001

Multivariate predictors
OR\textsubscript{Frailty} = 0.77, p<0.001
OR\textsubscript{Bleeding Risk} = 0.85, p=0.02
OR\textsubscript{Age} = 0.98, p<0.001

Paura dei sanguinamenti ????
Inerzia ????
Primum non nocere?
QUESTIONI APERTE

Efficacia e sicurezza degli anticoagulanti orali nell’anziano fragile con fibrillazione atriale: problema ancora aperto

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GIMSI-AcEMC

Utilizzo degli anticoagulanti orali nei pazienti anziani a rischio di caduta sincopale o non sincopale

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- Syncope Unit: Pasquale Abete, Attilio Del Rosso, Filippo Numeroso, Marco Tomaino

Si agli anticoagulanti, in particolare si ai DOACs
Grazie per la vostra attenzione