Anticoagulation Management Pearls

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March 30, 2019

Faculty Disclosure

• Dr. Rizal has no actual or potential conflict of interest associated with this presentation

Learning Objectives

• At the conclusion of this activity, pharmacists will be able to:
  – Describe effective anticoagulation management strategies
  – Describe components of effective anticoagulation education session
  – Identify barriers to learning

Background

• Effective anticoagulation management has been proven to improve pt. outcomes and safety
• 1st DOAC FDA approved in 2010
• Increased ADR’s associated with use of DOACs since approval
• Anticoagulation clinics ideally suited to help improve management

2018 CHEST Guidelines Updates

• DOACs increasingly preferred agent per CHEST guidelines for both Afs and VTE patients

<table>
<thead>
<tr>
<th>Afs Pts managed on VKA</th>
<th>Goal TTR &gt;70% Yes</th>
<th>Continue VKA</th>
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  | Interventions to improve TTR | TTR 65-70% | Switch to DOAC

TJC NSPG Updates

• Effective July 1, 2019 The Joint Commission revised its National Patient Safety Goal (NPSG) 03.05.01: Reduce the likelihood of patient harm associated with the use of anticoagulant therapy
• Goal-Reverse rise in adverse drug events associated with DOAC
• Eight new elements of performance must be met
• https://www.jointcommission.org/assets/1/18/R3_19_Anticoagulant_therapy_FINAL2.PDF
Anticoagulation Management Considerations

Effective Anticoagulation Management Strategies

Written Protocols & Evidence-Based Practice Guidelines

Effective Anticoagulation Management Strategies

Staff Education
Staff Education

- Initial Training
  - Indication and duration for Anticoagulant Therapy
  - Perioperative management
  - Policies and procedures of clinic
  - Management strategies of non adherent pts
  - Motivational interviewing
  - Diversity training
- Initial and yearly competencies
- Re-training as needed

Effective Anticoagulation Management Strategies

- Use written protocols and evidence-based practice guidelines
- Staff education
- Patient and family education
- Transitions of care
- Adherence issues
- Motivational interviewing

Patient & Family Education

- Background
  - Standardized pharmacist provided anticoagulation counseling has been proven to:
    - Improve pt’s medication knowledge and compliance
    - Improve outcomes
    - Reduce ADE
    - Decrease readmission rates
  - TJC recognizes patient/family education as a vital component of anticoagulation management and have included it in their National Patient Safety Goals (NSPG)

- TJC NPSG requirement
  - Collect and document preferred language into the pt’s chart
  - Provide effective written and oral communication in pt’s preferred language
  - Incorporate pt’s cultural and spiritual values into their treatment
  - Ensure qualification of interpreters through proficiency assessment, training, education and experience

Case Presentation

- M.S. is 80yo Bhutanese Male Ht: 5ft 10in, Wt: 77kg with PAF with PMH of HTN, Anxiety and Depression on HD qMWF.
- Current Med List:
  - Metoprolol XL 50mg po qday
  - Fluoxetine 20mg po qday
  - Lorazepam 1mg po PRN anxiety
- Question: What barriers to learning may you encounter with this patient?
Cultural and Religious Considerations

• Religious beliefs
  – Dietary restrictions
  – Attitude towards healthcare and modern western medicine
• Cultural Issues
  – Direct vs. indirect communication
  – Identify which individual or family member makes health care decisions for the pt.
  – Family involvement

Management of Cultural & Religious Considerations

• Develop staff education/training
• Ask the patient
• Use online resources
  – http://ethnomed.org/
  – http://depts.washington.edu/pfes/CultureClues.htm
• Use community resources
• Use interpreters
• Use internal resources (eg. Staff members)

Psychological Barriers

• Anxiety
• Depression
  – Feeling of hopelessness
• Bipolar disorder
• Dementia
• Psychosis
  – Delusional or paranoid

Management of Psychological Barriers

• Treat underlying psychiatric condition
• Utilize motivational interviewing strategies
• Utilize family members/care providers
• Interdisciplinary approach (Social worker, physician, nurse/VNA)

Desire & Motivation to Learn

• Denial
  – Lack of acceptance of diagnosis severity or prognosis
• Reward for non-adherence
  – Lose “medical disability” status which has work and financial implications
• Drug and Alcohol Dependence
• Stressors
  – Poverty and homelessness
  – Troubled relationship with significant others
  – Difficult parenting problems
  – Long working hours

Management of Desire & Motivation to Learn

• Denial-Pt. education on disease state & medication
• Drug & Alcohol dependence-Rehabilitation and counseling, Support groups, Motivational interviewing
• Stressors
• Poverty & Homelessness-Shelters, Family and friends support
• Troubled relationship-Counseling, Support groups
• Difficulty parenting problems-Counseling, Support groups
• Long working hours-Identify ways to incorporate health care into the day
• Lose “medical disability” status which has work and financial implications-Provide incentives for not being disabled
Physical Limitation

- Vision Impairment
  - Glaucoma, Cataract
- Limited Mobility
  - Wheelchair/Bed bound
- Comorbid conditions
  - Parkinson’s disease
  - Reynaud’s disease
  - Arthritis

Management of Physical Limitation

- VNA
- Pill boxes
- Family members and Caregivers
- Assisted living facility medication management programs
- Pharmacy delivery of meds
- Pharmacy provided blister packs
- Magnifying glasses, glasses
- Easy open caps

Language Barrier

- Limited English Proficiency (LEP)
  - English not primary language
  - Limited ability to read, speak, write or understand English
- Deaf and Hard of Hearing

Management of Language Barrier

- Maintain eye contact with the patient
- Speak at a regular pace and volume
- Be aware facial expressions used to convey tone/meaning
- Use visual aids
- Use Interpreters

- Do not rely on lip reading
  - Only 30-45% of English is visible on the lips
- Do not assume pt. has hearing aid
- Use VRI and Remote interpreting
- English and ASL have different grammar and syntax

Management of Language Barrier

- Use Interpreters
  - Mandated by multiple state and federal statues
  - Accurate and effective communication between provider and pt. recognized as most essential component of healthcare encounter

Qualified

- Assessed for their fluency in both languages
- Proficient in the skills and ethics of interpreting
- Knowledgeable about specialized medical terms and concepts
- Speak at regular pace and volume to pt. not interpreter

Unqualified

- Bilingual staff
- Minors
- Family and Friends

Health Care Literacy

- Definition: The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (Ratzan and Parker, 2000).
- Low health care literacy results in more non-compliance, ER visits, hospital stay and mortality
Management of Health Care Literacy

- Provide education and counseling at 5th grade level
- Use visual aids
- Give simple, precise instructions

Cognitive Ability

- Patient’s ability to process information
- Associated with learning and problem solving
- Involves memory, ability to learn new information, speech understanding of written material
- Verbal, spatial, psychomotor, and processing-speed ability
- Level of consciousness, memory, awareness, problem-solving, motor skills, analytical abilities, or other simple concepts.
- Elderly-Memory loss, trouble thinking of the right words while speaking or writing “drawing a blank”-affects their ability to understand instructions

Management of Cognitive Ability

- Keep communication to 5th grade level
- Use family members
- Use repeat back technique to ensure understanding

Learning Style

- Visual- Individuals learn best by being able to see the information being presented.
- Auditory- Individuals learn best when listening and receiving verbal instruction
- Reading/Writing- Individuals learn best by taking notes or reading printed text
- Kinesthetic- Individuals learn best by being able to manipulate objects and gain hands on experience

Management of Learning Style

- Auditory
  - Repeat back
  - Ask questions
- Visual
  - Videos
  - Provider demonstration
  - Pictures
  - Graphics
  - Flow Chart
  - Diagrams
- Reading/Writing
  - Written materials
  - Written quizzes
  - Pamphlets
  - After visit summary
- Kinesthetic
  - Exercises
  - Pt. demonstration

Case Presentation

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- Question: What barriers to learning may you encounter with this patient?
- Answer: Cultural, Language, Health Care Literacy, Cognitive Ability Psychological barrier
### Components of Effective Anticoagulation Education

- Face-to-face interaction with trained professional who ensures the patients understands the risks involved, the precautions that should be taken, and the need for regular monitoring.
- Ongoing
- Tailored learning to meet pt’s learning style
- Use of written resources, audio-visual aids
- Utilization of teach-back methods
- Include all family members, caregivers
- Culturally sensitive
- Use of interpreters as needed

### Components of Effective Anticoagulation Education

- Assess baseline knowledge
- Ask open-ended questions
- Fill in gaps in baseline knowledge
- Keep message short and simple
- Use interdisciplinary approach (eg. Dietician, social workers, physician, nursing)
- Include fall reduction strategies
- Evaluate and document the patient’s understanding of the education and training

### Anticoagulation Education Topics

- Familiarize pt. with clinic staff members
- Clinic location, phone & fax #, hours of operation
- Indication
- Mechanism of Action
- Dose, Frequency
- How to administer
- Storage
- Missed doses
- Refill process

### Anticoagulation Education Topics

- Drug-food interactions, alcohol and tobacco use with warfarin
- Drug-drug interactions (both prescription and OTC)
- Blood tests (Target INR, renal and hepatic function)
- Factors that change INR result
- Possible side effects
- Emergency treatment/surgical & dental procedures
- Pregnancy
- Precautions, Who and when pt. should call for questions/issues
- Activities of daily life & travelling
- Transitions of care

### Case Presentation

- M.S. reports that he is scheduled for an epidural steroid injection in 1 month with Dr. Pokhrel and is looking for guidance regarding his anticoagulation for the upcoming procedure.

#### Question:
- What would you do with this information?

### Effective Anticoagulation Management Strategies

- Use written protocols and evidence-based practice guidelines
- Staff education
- Patient and family education
- **Transitions of care**
- Adherence issues
- Motivational interviewing
Transition of Care Concerns

- Transitioning to/from hospital/SNF admissions
- Anticoagulation initiation
- Transitioning between oral anticoagulants
- Perioperative management

Transition of Care Concerns

- Transitioning to/from hospital/SNF admissions
  - Ineffective transition of care results in preventable hospital readmissions
  - Medicare codes 99495 and 99496 reimbursable for transitional care services
  - Non-face-to-face encounter within 48hrs after discharge
  - Face-to-face office visit 7-14 days post discharge
- Counseling
  - Counsel pt. on proper use of new medications
  - Reinforce importance of adherence
- Medication review/reconciliation
  - Identify and address changes or discrepancies noted
  - Identifies need for additional tests or lab work
- Determine whether there are procedures or referrals ordered for the patient

Transition of Care Concerns

- Anticoagulation initiation
  - Current Weight
  - Pt's Age
  - Ensure no interacting meds on pt's profile
  - Assess pt. for appropriateness of prescribed regimen including indication, dose & frequency
  - Determine if overlap needed
  - Laboratory parameters
    - INR
    - Renal Function
    - Hepatic Function
    - Hb&H
  - See presentation on Direct Oral Anticoagulants and Factor IIa and Xa Inhibitors for additional details

Transition of Care Concerns

- Perioperative management
  - Coordinate with physicians
  - Determine Thromboembolic Risk
  - Determine Bleeding Risk
  - Determine Timing of Anticoagulant Interruption
  - Assess whether “bridging” therapy needed
  - Provide education to patient/family members regarding interruption and administration of injectable anticoagulation if needed
  - Ensure prescription for LMWH sent to pt's pharmacy if needed

Case Presentation

- M.S. reports that he is scheduled for an epidural steroid injection in 1 month with Dr. Pokhrel and is looking for guidance regarding his anticoagulation for the upcoming procedure.
- Question: What would you do with this information?
- Answer:
  - Assess pt's thromboembolic and bleeding risk involving the referring physician as well as Dr. Pokhrel
  - Develop perioperative strategy
  - Relay information to pt. and provide education as needed
  - Ensure pt's accessibility of prescribed medication
### Effective Anticoagulation Management Strategies

- Use written protocols and evidence-based practice guidelines
- Staff education
- Patient and family education
- Transitions of care
- **Adherence issues**
- Motivational interviewing

### Adherence Issues

- **Barriers to Medication and Treatment Plan Adherence**
  - Cognitive or physical impairment
  - Polypharmacy
  - Financial
    - Medication Cost
    - Limited income
  - Lack of social and family support
  - Comorbid conditions
  - Pt’s cultural background

### Management of Adherence Issues

- Simplify medication regimen
- Reduce medication cost
- Medication adherence aids
- Improve pt-prescriber relationship and communication
  - Use motivational interviewing
- Patient education
- Individualize strategy for each patient

### Effective Anticoagulation Management Strategies

- Use written protocols and evidence-based practice guidelines
- Staff education
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- Transitions of care
- Adherence issues
  - Motivational interviewing

### Motivational Interviewing

- Encourage pt’s intrinsic motivation to implement positive change by:
  - Listening and collaborating with pt.
  - Understanding patient’s motivation
  - Exploring and resolving ambivalence and resistance
  - Empowering and encouraging the pt.
  - Avoiding argument and judgement
  - Expressing empathy

### Patient Case

M.S. mentions that he missed his last 2 doses of his anticoagulant medication because he ran out of pills for the month. What is the best response in this situation?

- A. Emphasize importance of adherence and stress the consequences for non-adherence including clinic’s discharge process
- B. Suggest using pill box to help pt. remember
- C. Assess whether there is a financial reason why pt. ran out of pills and rectify as needed
- D. All of the above
AIDET

• Acknowledge
  – Greet the patient by name
  – Acknowledge their right to confidentiality
• Introduce
  – Introduce yourself
• Duration
  – Inform the patient how long the visit is anticipated to take
• Explanation
  – Explain what will happen during the visit
• Thank You
  – Thank the patient and ask if they have any questions

References

• https://www.ncbi.nlm.nih.gov/books/NBK216035/#_ddd00036_
• https://blog.prezi.com/the-four-different-types-of-learners-and-what-they-mean-to-your-presentation-strategy/
• https://jamanetwork.com/journals/jamainternalmed/article-abstract/409914
• https://www.jointcommission.org/assets/1/6/NPSG_Chapter_HAP_Jan2019.pdf
• https://www.theflame.com/contact/915/how-to-relay-expressions-if-you-are-relaying.html