John Dempsey Hospital
and
UConn Health Surgery Center
at

Department of Anesthesiology Clinical Practice Reference for the Preoperative Preparation of the Surgical Patient

Updated March 9, 2015

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Dear Colleagues,

We have revised our Pre-operative Guidelines for surgeries at UConn Health Surgery Center (formerly FSC) and John Dempsey Hospital. Please see the attached.

I would ask that all of your staff discard **ANY and ALL** other guidelines or information that they may have as this is the most current information. The older information is outdated and when used for patient care issues is inaccurate and misleading.

Thank you very much.

Thomas J. Yasuda, M.D.
Clinical Chief - Department of Anesthesiology
Medical Director of the Operating Room
John Dempsey Hospital/UConn Health Surgery Center
UConn Health
263 Farmington Avenue
Farmington, CT 06030
860.679.8341 office
860.588.2005 pager

Marc Paradis, M.D.
Medical Director of the Pre-Admission Evaluation Center (PEC)
John Dempsey Hospital/UConn Health Surgery Center
UConn Health
263 Farmington Avenue
Farmington, CT 06030
860.679.3640 or 860.679.6688 office
860.825.0617 pager

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Please note the following changes from the previously published guidelines dated 10/2013:

- The criteria for **EKG**'s is no longer based on age, it is based on medical history. See page 6.

- Patients who have a **BMI >50** are **not candidates** for surgery at our free-standing outpatient facility, UConn Health Surgery Center (FSC). See page 14.

- All patients that require a transfusion or any other blood product, must have the surgery at JDH. **We do not give any blood products at UConn Health Surgery Center (FSC)**. See page 14.

- **Anesthesia consult** requests should be faxed to PEC at 860.679.6687, or requested via NextGen. See pages 6 and 17.

- Additional info on pre-operative management of **anticoagulants and antiplatelet medications.** See pages 12 and 13.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Contents

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Clinical Practice Reference for the Preoperative Preparation of the Surgical Patient

Delivery of a safe anesthetic requires current, objective information prior to the surgical procedure. The patient's medical status should be stable, optimized and documented. Laboratory testing is warranted under certain circumstances, although these requirements are becoming less frequent. The following guidelines should help to avoid unnecessary testing, promote cost effectiveness, prevent unnecessary delay, and ensure a safe surgical procedure.

History and Physical Examination

A legible history and physical examination is the *cornerstone of preoperative preparation*. If a patient routinely receives care from a specialist, i.e. cardiologist or pulmonologist, a recent note from that physician about the patient's current status is invaluable for our evaluation. Additional information such as a recent stress test, pulmonary function tests, echocardiograms, etc., is always helpful.

The Anesthesiologist desires information with regards to the following:

1. What are the patient's ongoing medical problems?
2. Is the patient optimally managed?
3. What is the patient's cardiopulmonary functional reserve, and are there any objective tests available to document this?
4. What is the current medical regimen?

We ***do not*** ask the referring physician or specialist to *"**clear the patient for surgery**"*. What we do ask is for *objective information* so we can determine anesthetic risk, discuss these with the patient, and plan optimal anesthetic management. If there is any question as to the adequacy of information requested in questions 1-4 above, please contact the Preadmission Evaluation Center (PEC) at 860-679-6688.

History and physical examination, per JCAHO standards, must be **within 30 days** in stable patients (from the date of planned surgery), and updated on the day of surgery by the surgeon.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

EKG and Laboratory Data

There is mounting evidence that routine preoperative testing is very expensive and does not improve overall outcome. Other than a *few routine caveats*, preoperative testing should be *individualized* based on the H & P and the severity and duration of the planned procedure. A debilitated patient requiring a minor procedure (cataract surgery) may need little additional testing, whereas a healthy patient undergoing major vascular surgery (thoracotomy) may require a significant work up.

The only required preoperative test is an EKG in patients with diabetes over the age of 40. All other testing is dictated by patient condition or surgical procedure. Please refer to the attached reference sheet which you can share with your office staff.

Pregnancy testing will be offered on the day of surgery for appropriate patients if warranted by surgeon order, medical history or patient request. Any patient with a positive pregnancy test will be counseled regarding known effects of anesthesia and surgery, and given the option to proceed or postpone based on this discussion.

Anesthesia Consults

If you have concerns about your patient's airway, a previous reaction to anesthesia, or if your patient has significant co-morbidities, and you would like a formal Anesthesia consult, please fax a consult request and an Authorization to Obtain and/or Disclose Health Information form signed by the patient to:

PEC Coordinator
Fax 860-679-6687

Consults can also be requested via Nextgen. *Please be sure to identify the concern or problem.*

If an issue requires immediate resolution or involves an inpatient, please have the hospital operator page:

Kathleen Lillicraf MHS, PA-C, **Department of Anesthesiology**
or the Anesthesia Clinical Coordinator for the day.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

EKG
All patients with diabetes over 40 or a history of cardiac disease, diabetes or any other disease processes that may affect cardiac status – or when **medically indicated.**

Glucose
Diabetic patients on day of surgery, if on insulin or oral agent

Pregnancy
Testing will be offered to appropriate patients

Hematocrit and Platelet Count
Indicated by patient history (ongoing blood loss, anemia, chemo Rx) or anticipated surgical blood loss, invasive surgery

Electrolytes, BUN, Creatinine
Indicated by patient history, invasive surgery, or anticipated excessive blood loss
Chronic diuretic use is not an indication for serum K testing in otherwise healthy patients

Coagulation tests
Indicated for patients with history of bleeding disorder, or on anticoagulants
If not documented as being normal, need testing on the day of surgery

Chest X Ray and Pulmonary Function Tests
Indicated for pulmonary debilitated patients, or those with recent change in symptoms.
Indicated for major thoracic surgery

EKG Abnormalities
The following **new onset EKG abnormalities** require further cardiac evaluation:

- Any ***new*** onset cardiac arrhythmia, i.e. atrial fibrillation or flutter, SVT
- LBBB
- Type 2 second degree or 3rd degree heart block
- ST wave elevation or depression
- Q wave pattern indicative of MI
- Prolonged QT interval with hx of syncope or family hx of sudden death
- Short PR interval with palpitations, syncope

The following diagnoses, if appropriately noted in **previous EKGs or by physician history**, usually do not require further evaluation:

- First degree or Type 1 second degree heart block
- Known RBBB, LBBB, LAFB, PVC

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Clinical Practice Reference for Patients with Pacermakers and/or AICD's (CIED's)

- All patients with pacemakers/AICD's scheduled for elective surgery should be evaluated by the surgeon and PEC.

- The most recent cardiology note and/or electrophysiology note should be included in the preoperative evaluation of every patient with a pacemaker/AICD.

- Patients with pacemakers or AICD's should be scheduled for surgery 9am or later to ensure Cardiology support, if necessary.

- Cardiology requires 48 hours advance notice to arrange for interrogations.

The following information should be obtained from the patient during their pre-surgical visit and forwarded to the PEC:

1. Type and model number of the device. Most patients have a wallet card; a photocopy is best.
2. Location of the device – right or left thorax area
3. Contact the patient's Cardiologist or Electrophysiologist and have them fax the most current office note/interrogation.
4. Copy of the most recent EKG helps determine whether they are pacer dependent.
5. The type of surgery, the location of the surgery and whether monopolar cautery is necessary.

Having this information 48 hours prior to of surgery will allow coordination with Cardiology for consultation and DOS interrogation, if necessary.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

NPO Guidelines

In general, all patients should be NPO after midnight for all procedures the next day.
For late afternoon cases only:

Clear liquids until 4 hours prior to scheduled arrival at surgical site
Water, black coffee or tea (***NO CREAM OR MILK***, sugar is OK)
Clear broth or juice; no pulp -"see through"

These afternoon case exceptions will be discussed **individually with the patient by the preoperative nurse** the day before surgery and should not be discussed by the surgeons' office with the patient.

Children 1-10 NPO 6 h for food, including animal/breast milk, or formula
NPO 2 h for clear liquids

Children < 1 NPO 6 h for food, including animal milk or formula
NPO 4 h for **breast milk**
NPO 2 h for clear liquids

Note: all times are prior to **scheduled arrival time** due to uncertainties regarding gastric emptying, such as gastroparesis/ileus, obesity (BMI>35), or narcotic use.

Medication on the Day of Surgery

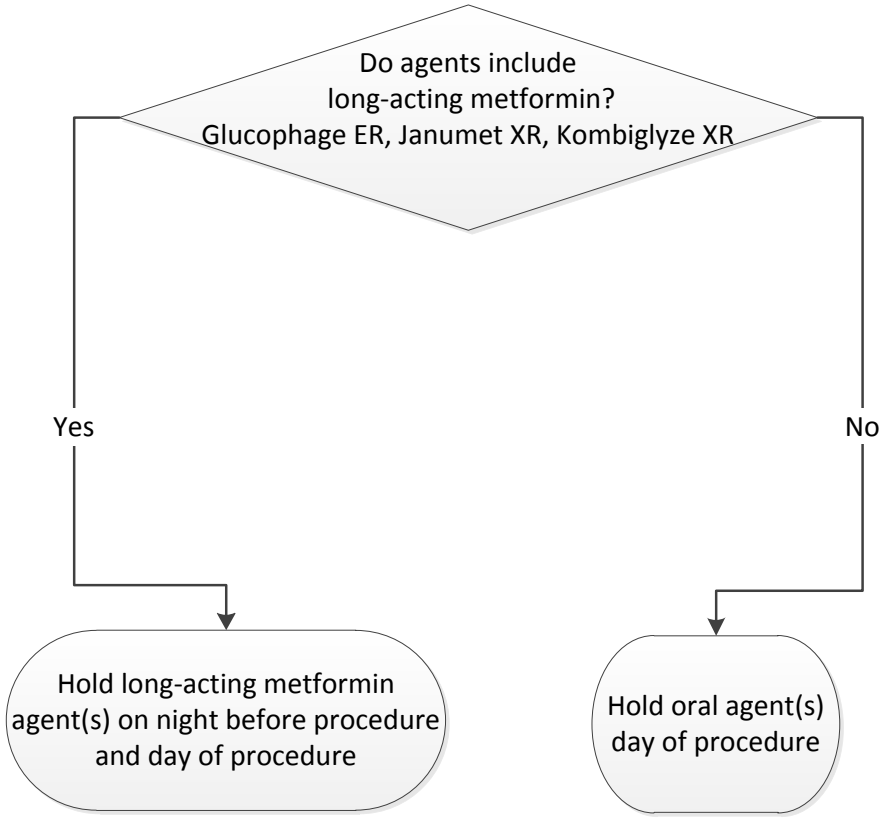
Take most routine medication on the morning of surgery with a sip of water, especially cardiac, hypertension, GERD/ulcer, pulmonary, neuro/seizure meds, hypothyroid medications. The exceptions are ACE-Inhibitors (ACE-I) and Angiotension receptor blockers (ARB) which should be held on the day of surgery.

Treatment	Evening before Surgery	Day of Surgery
ACE-I, ARB	Take usual dose	Hold

Patients with **diabetes** should be scheduled as the first case of the day if possible. Depending on the medications taken, the following protocols should be followed (see attached flowsheets).

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Pre-operative management of oral hypoglycemic agents

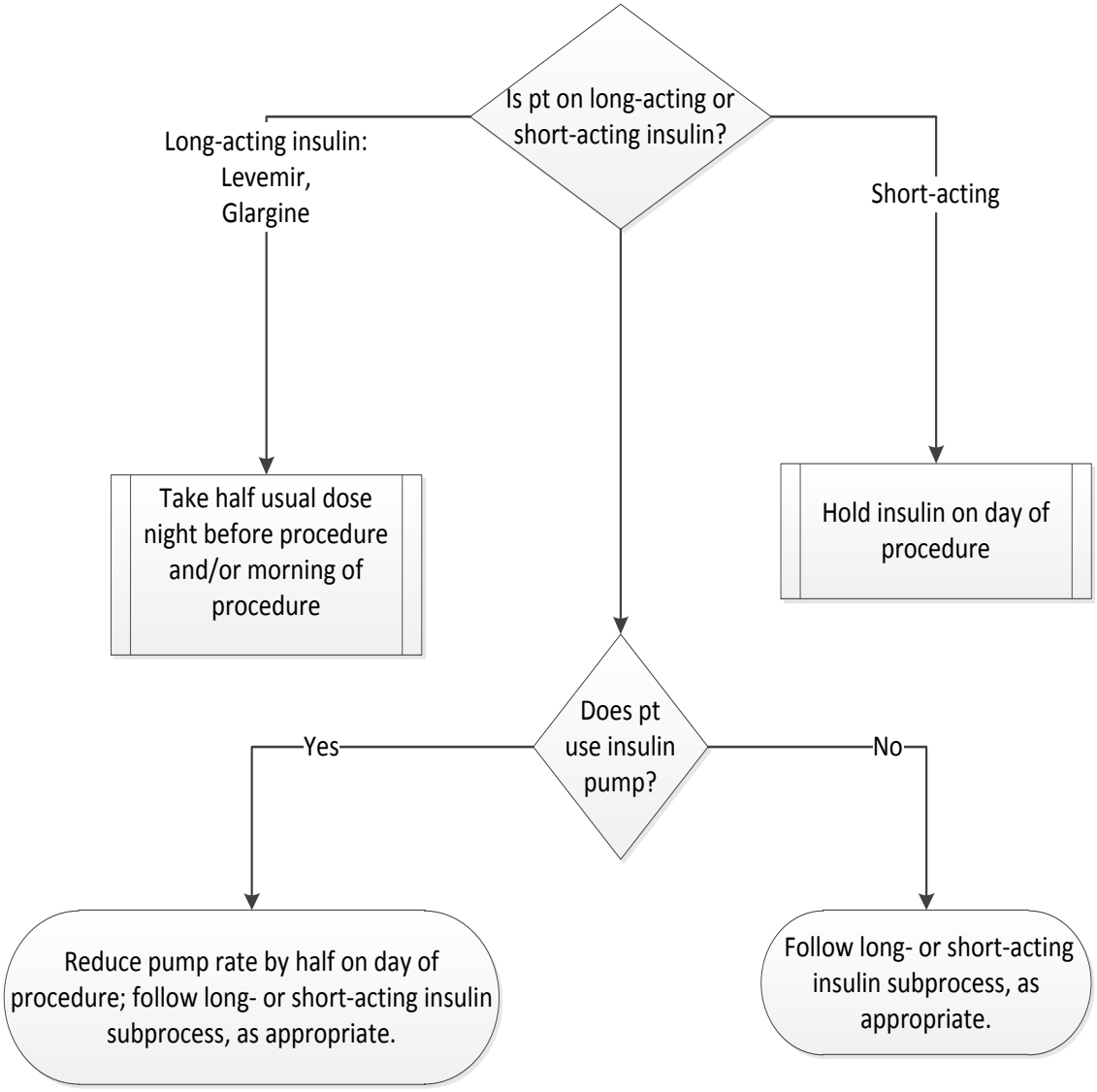


All patients may check glucose level anytime prior to arrival and consume up to 8 oz. apple juice to treat hypoglycemia; must report to staff upon arrival.

If the practitioner is actively managing patient's diabetes, follow their instructions.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Pre-operative Management of Insulin



All patients may check glucose level anytime prior to arrival and consume up to 8 oz. apple juice to treat hypoglycemia; must report to staff upon arrival.

If the practitioner actively managing patient's diabetes, follow their instructions.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Pre-operative management of anticoagulants and antiplatelet medications.

Patients on **anticoagulants / antiplatelet medications** require **specific instructions** to be determined on a case-by-case basis by the surgeon, cardiologist (or physician who prescribed the anticoagulation regimen) and anesthesiologist.

The risk of discontinuing anticoagulants / antiplatelet medications, especially in patients with coronary stents, must be balanced against the risk of increased surgical bleeding.

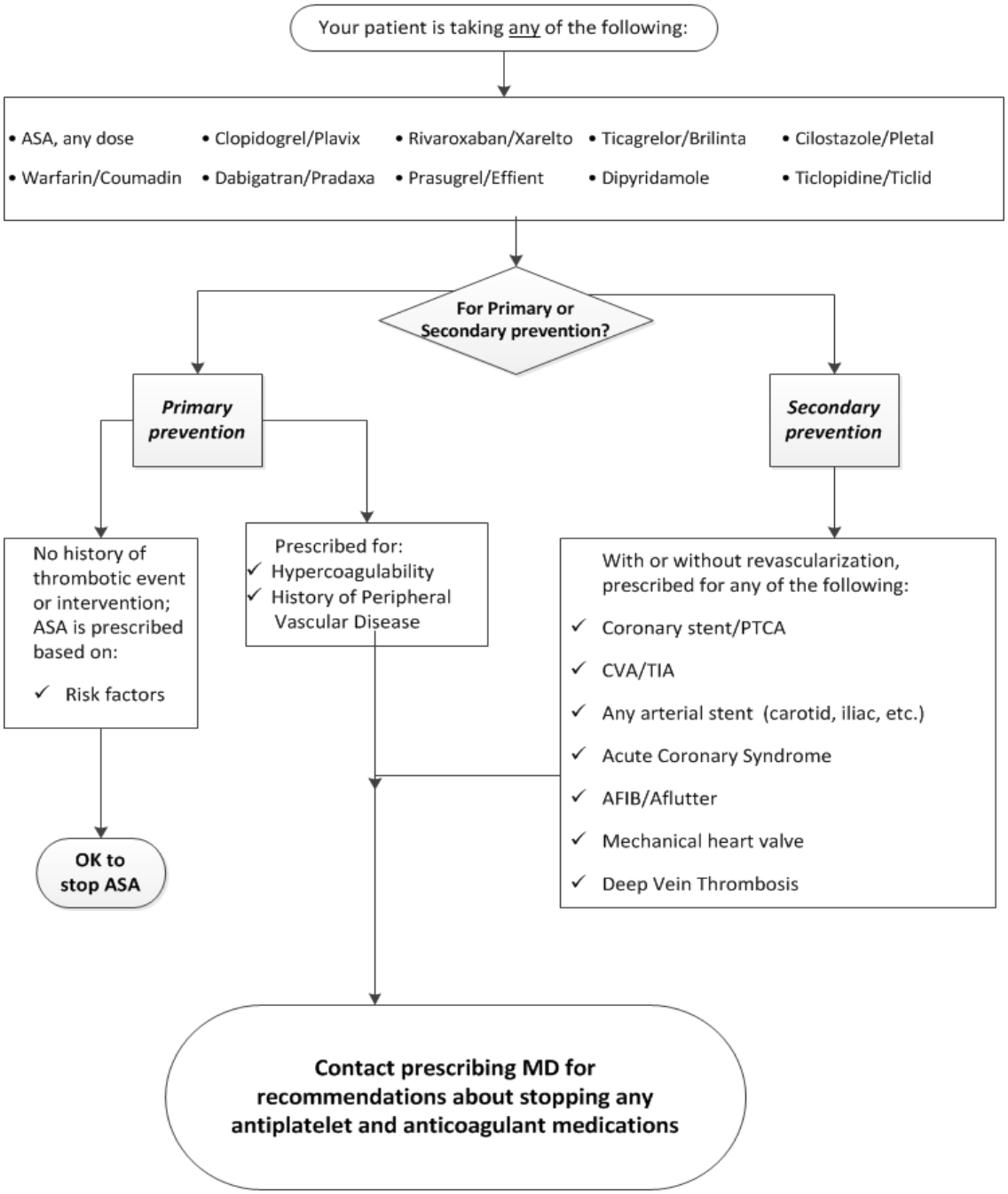
It is always helpful for the Anesthesiologist to have documentation from the prescribing MD addressing management of antiplatelet/anticoagulant medications.

See next page for algorithm.

ACC/AHA Peri-operative Cardiovascular Evaluation Practice Guidelines have been published in *Circulation*, Sept 2007 for further reference.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Pre-operative management of antiplatelets and anticoagulants



UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Patient Selection Criteria for UConn Health Surgial Center (FSC)

Patient Co-Morbidity	Minor Procedure -Local anesth/sedation -Short General Anesthesia -Min Postop Narcotics: D & C/hysteroscopy, Carpal tunnel, Cataract, Simple Arthroscopy	Moderate Procedure -Longer cases -More extensive surgery
Sleep Apnea: • Compliant with CPAP • Non Complaint with CPAP	OK OK	*Requires review*
BMI ≥ 50	**Not appropriate**	**Not appropriate**
Weight > 350 lbs/160 kg	*Requires review for equipment limitation* *Requires airway examination*	
Cardiac Disease: • Stable with cardiologist follow up documented • EF < 40 • Pacemaker or AICD • Valvular disease – severe	OK *Requires review* *Requires review* *Requires review*	**Not appropriate**
Pulmonary Disease requiring home oxygen use	selected cases under minimal sedation	**Not appropriate**
Difficult Airway history	*Requires review*	
Renal Failure	OK with normal labs DOS *(plan dialysis day before procedure)*	*Requires review*
Need to transfuse blood products: FFP, platelets, PRBCs, Factor Infusion	**Not Appropriate**	

Please send all patient information requiring review to:
Coordinator, Preadmission Evaluation Center (PEC)
PEC Dept Account, PECda@UCHC.edu

ISSUE DATE:	March 9, 2015
PREPARED BY:	Amir Tulchinsky, M.D.
REPLACES/SUPERSEDES	5/2013
APPROVED BY:	Department of Anesthesiology

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Day of Surgery Medication Discharge Instructions

(for patients over 60 Kg or 12 yrs. of age)

- During your procedure, you were given acetaminophen 1000 mg at____:____ am/pm

- As prescribed by your physician, take _____(checked below), no sooner than ____:____ am/pm

Medication	Acetaminophen/tablet	Maximum # tablets to take in next 24 h
( ) Tylenol regular strength	325 mg	9 tabs (2925 mg)
( ) Tylenol Extra Strength	500 mg	6 tabs (3000 mg)
( ) Tylenol #3 (codeine)	300 mg	10 tabs (3000 mg)
( ) Percocet (5/10 mg oxycodone)	325 mg	9 tabs (2925 mg)

(NOTE: Only applies to formulations of PERCOCET with 325 mg of Acetaminophen)

( ) Norco (hydrocodone)	325 mg	9 tabs (2925 mg)
( ) Lortab (hydrocodone)	500 mg	6 tabs (3000 mg)
( ) Vicodin (hydrocodone)	300 mg	8 tabs (3000 mg)

To prevent exceeding **4000 mg (4 grams)** total dose of acetaminophen in the next 24 hours, please follow the instructions above.

If you are also taking over the counter medications, please review the product's list of ingredients to ensure it does not contain acetaminophen.

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

- Link to UConn Health Administrative Policy Requirements for History and Physicals

  http://nursing.uchc.edu/hosp_admin_manual/docs/06-017.pdf

- Link for UConn Health H&P forms

  http://policies.uchc.edu/policies/hch964.pdf

- Anesthesia Consult fax cover sheet, see following page

UConn Health
John Dempsey Hospital/UConn Health Surgery Center
Department of Anesthesiology

Preadmission Evaluation Center (PEC)

Main number 860.679.6000 **Fax: 860.679.6687**

ANESTHESIA CONSULT REQUEST

Please complete the info below and fax with supporting records

From _____ Phone _____

To PEC, MD/APRN/PA

Total number of pages including cover page: _____

RE (patient name) _____ DOS _____

Specific problems/concerns

_____

_____

_____