MHIF FEATURED STUDY: Complexa PH

DESCRIPTION:
Purpose of the study is to determine the efficacy and safety of CXA-10 in patients with pulmonary arterial hypertension. Primary endpoints include change in RVEF by cardiac MRI and change in PVR by right heart catheterization.

CXA-10 is different from currently available PAH therapy as it works through anti-oxidant, anti-inflammatory and anti-fibrotic activity.

CRITERIA LIST/ QUALIFICATIONS:

Inclusion
Diagnosis of pulmonary arterial hypertension on stable background therapy, including PDE5 inhibitors, ERAs, etc.

Exclusion
Significant co-morbidities or recently medically unstable
Diagnosed with atrial fibrillation (AF)

Pulmonary arterial hypertension is uncommon; however, the 5-year survival rate for patients is only 57 percent. Ongoing research is important for patients!
What William Shakespeare Can Teach Us About the Practice of Medicine

To capably practice medicine, what do we need?
a fundamental vocabulary in science
the skills to gather history & perform a physical exam
the capacity to think critically
a decisiveness to recommend a diagnostic/treatment plan
an aptitude to operate efficiently and communicate precisely

But it also requires a fundamental understanding of human nature...

...and a willingness to care.
Somehow someone believed that a year of intense training in Organic Chemistry would better qualify us to be doctors.

FAILS ORGANIC CHEMISTRY TEST

HIGHEST GRADE IN THE CLASS
We may memorize the facts and pass the tests. We may be very smart.

But without understanding human nature, we are not wise.
One of William Osler's greatest gifts was a keen sense of human nature. He recognized the profound value of seeing what motivated people as well as what plagued them.

How did he become so adept at this?

- By seeing lots of patients
- By caring about them
- By reading great literature which further delved into the depths human nature
  - AND by trying to better understand himself

- But this requires humility, patience, experience.
- It requires a willingness to learn that which is almost unteachable
“Start at once a bedside library and spend the last half hour of the day in communion with the saints of humanity.” - Sir William Osler

But who do you start with?
THIS guy...

Oh, sure...would could justify physicians reading Shakespeare for the medical maladies alone...
When the fit was on him, I did mark,
How he did shake: 'tis true, this god did shake;
His coward lip did from their colour fly,
And this same eye whose bend doth over the world
Did lose his lustre: I did hear him groan.
(Cassius critical of the “god-like” Julius Caesar, epilepsy)

O, thou art a perpetual triumph, an everlasting bonfire-light! Thou hast saved me a thousand marks in links and torches, walking with thee in the night betwixt tavern and tavern.

(Falstaff on Bardolph’s rosacea in Henry IV, pt I)
But even more, William Shakespeare had an uncanny ability to capture the essence of human nature in his play's characters.

In tragedy, comedy and history, his figures came to life simply because they seemed... well... like us.

- Smart and foolish, brave and cowardly, innocent and guilty, generous and selfish
- The heroes were heroic, but flawed
- The villains were villainous, but sympathetic
- Shakespeare's characters were everyday figures from different walks of life and were comprised of shades of light and dark.
“The line separating good and evil passes not through states, nor between classes, nor between political parties either -- but right through every human heart -- and through all human hearts. This line shifts. Inside us, it oscillates with the years. And even within hearts overwhelmed by evil, one small bridgehead of good is retained. And even in the best of all hearts, there remains ... an unuprooted small corner of evil.”

– Aleksandr Solzhenitsyn

“It is the business of art to seize these nameless points of greatness and littleness: the truth is...that art has to single out sins that are not to be found in any decalogue and virtues that cannot be named in any allegory.”

- G.K. Chesterton
But does one need to be a Shakespeare scholar to appreciate his wisdom regarding human nature?

Hardly.
“I hasten to say that the [scholar] is very learned and I am very ignorant. I do not profess to know much about Shakespeare, outside such superfluous trifling, as the reading of his literary works.”

– G.K. Chesterton

“Aesthetes have goaded and jaded their artistic feelings too much to enjoy anything simply beautiful. The definition of an aesthete is a man who is experienced enough to admire a good picture, but not inexperienced enough to see it.”

- G.K. Chesterton
When we read Shakespeare’s works, I mean *really pay attention*, what do we see?

In essence, we see that Shakespeare’s characters are complicated, extraordinary, frustrating, inspiring beings of great consistency and contradiction...like our patients...

...and, in fact, quite like ourselves.
“Shakespeare opens a mine which contains gold and diamonds in unexhaustible plenty, though clouded by incrustations, debased by impurities, and mingled with a mass of meaner minerals.”

- Samuel Johnson

“The highest achievement possible to a man is the full consciousness of his own feelings and thoughts, for this gives him the means of knowing intimately the heart of others.”

- Johann Wolfgang von Goethe
But remember, to understand Shakespeare, you must feel – to truly tap into the deeply human – and not simply think.

Too often, we are convinced that we can reduce human nature to some predictable formula – that, in our modern scientific age, we are capable of fully divining why people do what they do...when, often, we can’t fully explain why we do what we do.
“Many a lad has known less about Shakespeare than he did when the only phrase he knew was ‘Anoint thee, witch’ – and he didn’t know where that came from. Now he can write the etymology of the words on an examination paper; but the witch herself has vanished. Information is the enemy of poetry.”

- John Jay Chapman

- If we arrogantly consider ourselves masters at interpreting the way others think and act, we will find ourselves wrong and our patients frustrated time and again...

- But if we humbly accept our limited understanding of the mysteries of human nature, we open ourselves to a fuller experience with our patients & ourselves

- Shakespeare’s characters explore those mysteries in their splendor & complexity
“Poetry is sane because it floats easily in an infinite sea; reason seeks to cross the infinite sea, and so make it finite. The result is mental exhaustion... To accept everything is an exercise, to understand everything a strain. The poet only desires exaltation and expansion, a world to stretch himself in. The poet only asks to get his head into the heavens. It is the logician who seeks to get the heavens into his head. And it is his head that splits.”
– G.K. Chesterton

“Don’t think, but look.”
– Ludwig Wittgenstein
In taking snatches of time to warm ourselves by the fires of life found in Shakespeare’s works, we will be reminded of the human and transcendent in our daily practice. If we appreciate the varied hues in Shakespeare's characters, we will better see the diverse hues within the patient seated before us in the exam room.

So... perhaps a little time with The Bard can teach us a even more about our very human patients (even more than Organic Chemistry)...and while we are at it, ourselves.
All the world’s a stage,
And all the men and women merely players;
They have their exits and their entrances,
And one man in his time plays many parts...

(As You Like It)

His acts being seven ages. At first, the infant,
Mewling and puking in the nurse’s arms.
Then the whining schoolboy, with his satchel
And shining morning face, creeping like snail
Unwillingly to school. And then the lover,
Sighing like furnace, with a woeful ballad
Made to his mistress’ eyebrow. Then a soldier,
Full of strange oaths and bearded like the pard,
Jealous in honor, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon’s mouth. And then the justice,
In fair round belly with good capon lined,
With eyes severe and beard of formal cut,
Full of wise saws and modern instances;
And so he plays his part. The sixth age shifts
Into the lean and slippered pantaloon,
With spectacles on nose and pouch on side;
His youthful hose, well saved, a world too wide
For his shrunk shank, and his big manly voice,
Turning again toward childish treble, pipes
And whistles in his sound. Last scene of all,
That ends this strange eventful history,
Is second childishness and mere oblivion,
Sans teeth, sans eyes, sans taste, sans everything.
(As You Like It)
Don’t miss the unfolding drama of the patient sitting before you. Our patients (like us) are living lives with hints of tragedy mixed with heroism.

---

On Grief

Ah, dear Juliet...
I still will stay with thee;
And never from this palace of dim night
Depart again: here, here will I remain
With worms that are thy chambermaids; O, here
Will I set up my everlasting rest,
And shake the yoke of inauspicious stars
From this world-wearied flesh.

(Romeo on presuming Juliet dead)
You will never begin to understand someone unless you allow yourself to ache – just a little – when they ache.

On Uncertainty

There are more things in heaven and earth, Horatio, Than are dreamt of in your philosophy.
(Hamlet)
You don’t know it all.
Pay some deference to uncertainty and mystery.

On Dignity

CORDELIA
O, look upon me, sir,
And hold your hands in benediction o’er me.
No, sir, you must not kneel.

KING LEAR
Pray, do not mock me;
I am a very foolish and old man,
Fearscore and upward, not an base nor low;
And, to deal plainly,
I fear I am not in my perfect mind.
Methinks I should know you, and know this man;
Yet I am doubtful, for I am mainly ignorant
What place this is; and all the skill I have
Remembers not these garments; nor I know not
Where I did lodge last night. Do not laugh at me:
For, as I am a man, I think it is holy
To be my child Cordelia.

CORDELIA
And so I am, I am.

KING LEAR
Be your tears not w’th yon, faith, I pray, weep not:
If you have poison for me, I will drink it.
I know you do not love me for your sisters
Here, as I do remember, done me wrong:
You have some cause, they have not.

CORDELIA
No cause, no cause.

(King Lear)
Regardless of age or station, the dignity of the person before you is inviolable.

On Despair

No matter where; of comfort no
man speak:
Let’s talk of graves, of worms,
and epitaphs...
For God’s sake, let us sit upon
the ground
And tell sad stories of the death
of kings;
How some have been deposed;
some slain in war,
Some haunted by the ghosts they
have deposed;
Some poison’d by their wives:
some sleeping kill’d;
All murder’d: for within the
hollow crown
That rounds the mortal temples
of a king.
Keeps Death his court...

(Richard II)
On Reprove & Reform

[An unrespected king] is but as the cuckoo is in June,
Heard, not regarded; seen, but with such eyes
As, sick and blunted with community,
Afford no extraordinary gaze;

Being with his presence glutted, gorged and full.
And in that very line, Harry, standest thou;
For thou has lost thy princely privilege
With vile participation: not an eye
But a-weary of thy common sight.
Save mine, which hath desired to see thee more;
Which now dost that I would not have it do,
Make blind itself with foolish tenderness.

- Henry IV (to his wayward son, Prince Hal)
(Henry IV part 1)

This, in the name of God, I promise here:
The which if He be pleased I shall perform,
I do beseech your majesty may save
The long-grown wound of my intemperance:
If not, the end of life cancels all bands;
And I will die a hundred thousand deaths
Ere break the smallest parcel of this vow.

- Prince Hal (in response)
Never underestimate the value of tough, honest advice. And never grow cynical about people’s ability to reform.

On Anxiety

How many thousands of my poorest subjects Are at this hour asleep! O sleep, O gentle sleep, Nature’s soft nurse, how have I frightened thee, That thou no more wilt weigh my eyelids down, And steep my senses in forgetfulness? Why rather, sleep, liest thou in smoky cribs, — Canst thou, O partial sleep, give thy repose To the wet sea-boy in an hour so rude; And in the calmest and most silent night, With all appliances and means to boot, Deny it to a King? Then, happy low, lie down! Uneasy lies the head that wears a crown.

(King Henry IV pt II)
Men at some time are masters of their fates.
The fault, dear Brutus, is not in our stars
But in ourselves, that we are underlings.
Brutus and Caesar: what should be in that ‘Caesar”
Why should that name be sounded more than yours?
- Cassius, plotting, to Brutus (Julius Caesar)
Alas, poor Yorick! I knew him, Horatio: a fellow of infinite jest, of most excellent fancy: he hath borne me on his back a thousand times; and now, how abhorred in my imagination it is! My gorge rims at it. Here hung those lips that I have kissed I know not how oft. Where be your gibes now? Your gambols? your songs? your flashes of merriment, that were wont to set the table on a roar? Not one now, to mock your own grinning?

To what base uses we may return, Horatio!

- Hamlet to Horatio
Life is short. Don’t miss what matters.

On our capacity to be irrational

Trifles as light as air
Are to the jealous confirmation strong
As proofs of holy writ.
(Iago plotting to make Othello jealous over Desdemona)
This day is called the feast of Crispian:
He that outlives this day, and comes safe home,
Will stand a tip-toe when the day is named,
And come at the name of Crispian.
He that shall live this day, and see old age,
Will yearly on the vigil feast his neighbours,
And say ‘To-morrow is Saint Crispian:’
Then will he strip his sleeve and show his scars.
And say ‘These wounds I had on Crispin’s day.’
Old men forget: yet all shall be forgot,
But he’ll remember with advantages,
What feats he did that day: these shall our names
Familiar in his mouth as household words:
Henry the king, Bedford and Exeter,
Warwick and Surrey, Talbot, and Gloucester,
Be in their flowing cups freshly remembered.
This story shall the good man teach his son;
And Crispin Crispian shall ne’er go by,
From this day to the ending of the world,
But we in it shall be remembered.
We few, we happy few, we band of brothers;
Shall think ourselves accursed they were not here,
And hold our storms with cheer and0 our sprigs
That fought with us upon Saint Crispin’s day.

(0enry V)
Everyone is hungry for purpose and inspiration.

On the Limits of Our Practice

Canst thou not minister to a mind diseased,
Pluck from the memory a rooted sorrow,
Raze out the written troubles of the brain,
And with some sweet oblivious antidote
Cleanse the stuffed bosom of that perilous stuff
Which weighs upon the heart?

- Macbeth to physician about his wife

Therein the patient
Must minister to himself.

- Physician

(Macbeth)
Science cannot always speak to the stuff of the soul.

"The fool doth think he is wise, but the wise man knows himself to be a fool."
(As You Like It)
If the true vocation of medicine is to heal our patients, we must also seek to know them. Curiously, as we do this we simultaneously begin to know ourselves.

In this pursuit, William Shakespeare is an indispensable guide.

“It is always time to stop repeating the wise sayings and begin to believe them.”
- Jacques Barzun
I wonder if she knows I exist... Should I call her? Maybe she doesn't even know I exist? Well, maybe she does... I'll call her. No, wait! I'm not sure if she knows I exist... Dang!

You know, I think I really like vanilla.

Same planet, different worlds.

Your outfit full of meddlesome is again open for business. Can we ask you anything? Carnon oil? Nuclear waste? A large snake?
"I never thought it was such a bad little tree. It's not bad at all, really. Maybe it just needs a little love."
MOM! MOM! A BIG DOG NOCKED ME DOWN AND HE STOLE HOBBES!

I TRIED TO CATCH HIM, BUT I COULDN'T, AND NOW I'VE LOST MY BEST FRIEND.

WELL, CALVIN, IF YOU WOULDN'T DRAP THAT TIGER EVERYWHERE, THINGS LIKE THIS WOULDN'T HAPPEN.

THERE'S NO PROBLEM SO AWFUL THAT YOU CAN'T ADD SOME QUIET TO IT AND MAKE IT EVEN WORSE.

DID YOU SEE THAT?

SEE WHAT?
It was on a Sunday morning much like this one that Binkley awoke with the truth. It had presented itself in a short dream involving talking coffee pots and a shimmering image of Bob Barker’s head on Bette Midler’s body. Its credibility thus firmly established, our hero, freshly burdened with an awesome clarity of vision, realized what he must do...
The keys to grappling with the mystery of human nature are humility and a willingness to care enough to pay attention.

On the Depths of Guilt

O, my offence is rank it smells to heaven...

---------
It hath the primal eldest curse upon't
A brother's murder.
My fault is past. But, O, what form of prayer
Can serve my turn? "Forgive me my foul murder?"
That cannot be; since I am still possess
Of those effects for which I did the murder,
My crown, mine own ambition and my queen.
May one be pardon'd and retain the offence?

- King Claudius kneeling in his chapel (Hamlet)
Don’t deign that you know just how someone feels.