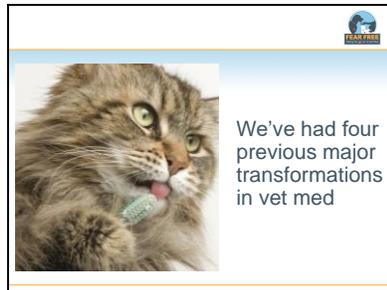


Slide 1



Slide 2



Four transformations – Feline medicine, preventive care, dentistry, pain management.

Of course, feline medicine is limited to cats that receive veterinary care (still far to few). And although 80% of companion animals have dental disease by the age of three, the majority of pets suffer in silence with a mouth full of inflammation and infection. Pain management is widely offered, but this only helps with pets that have pain (trauma, joint or disc disease, post surgery).

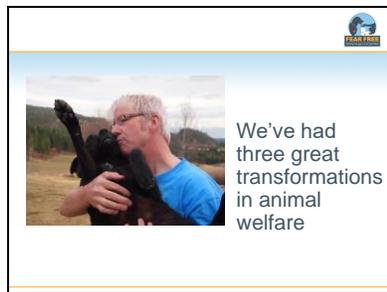
The most important transformation in the history of companion animal medicine is here now. And rather than just affecting a species or a condition, this initiative involves every pet in the shelter or in the home, every day, forever.

This make or break transformation is called Fear Free, and yes, it's for shelters, shelter hospitals and

clinics, and pets in homes after they've been adopted.

The polar opposite of a fad, Fear Free has become an animal welfare imperative. Too strong of a statement? Far from it.

Slide 3



There have been three Great Revolutions of Animal Sheltering

1. Cruelty Prevention – the earliest days of the modern humane movement were about protecting animals – primarily horses and dogs, but other animals as well – from abuse and harm. Think back to the book *Black Beauty* – it is a part of that early revolution.

2. Spay/Neuter – the huge decrease in shelter intake and euthanasia we saw from the 1970s to the early 2000s was driven by the second revolution, the routine, widespread spaying and neutering of companion animals

3. No Kill – Eventually, some enlightened leaders realized that it's ethically unacceptable to manage pet population by killing animals we saw as "excess." They began to re-examine the programs and policies of the past, and pave a way to a future where all healthy

and treatable pets would life and thrive.

4. Fear Free is the next frontier, and for the same reasons why it's the next revolution in veterinary medicine.

Slide 4



- Evolution has endowed humans and other mammals with a continuum of innate, hard-wired, automatically activated defense behaviors, termed the *defense cascade*. The defense cascade includes *arousal*, *flight-or-fight*, *tonic immobility* and *collapsing immobility* are responses of last resort to inescapable threat, when active defense responses have failed. Lastly, *quiescent immobility* is a state of quiescence that promotes healing and rest. From Harvard Review of Psychiatry (July 2015).
- All five of these are responses to threat mediated by neural circuits involving the extended amygdala, hypothalamus, periaqueductal gray (PAG), ventral pontine tegmentum, ventral and dorsal medulla and spinal cord. Each defense response has a

signature neural pattern that corresponds to a combination of activated connections within a descending neural network. This descending network terminates at the level of effector organs, where it controls a somatomotor component (which involves skeletal muscles), an autonomic/visceromotor component (which involves viscera), and a pain component.

Slide 5

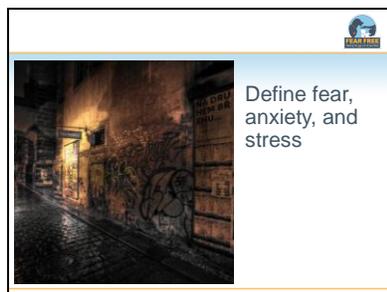


Our profession, and increasingly pet owners, are coming to understand that maladaptive fear is the worst thing a social species can experience and that it causes permanent damage to the brain. And that going to a veterinary practice (or grooming or boarding) where the pet will experience fear, is causing repeat, severe psychological damage to the pet. Conversely, taking a pet to a facility that looks after both the pet's physical and emotional wellbeing, is better for both the pet and the pet owner.

The Bayer Veterinary Healthcare Usage study showed conclusively that the #1 reason people weren't taking their pets to the vet as often was because of the stress to the pet. And #3

was stress to the pet owner taking the stressed pet to the veterinarian (#2 was money btw). So in providing a Fear Free experience for the pet, you can eliminate two of the top three reasons people aren't taking pets to the veterinarian. More pet owners visiting the veterinarian for their pet's accidents, illnesses and preventive care means everybody wins. The pet gets optimal care. The pet owner is doing the best job possible as the surrogate. The practitioner and hospital team member get to practice at a level that's rewarding (financial success and emotional wealth). The practice thrives.

Slide 6

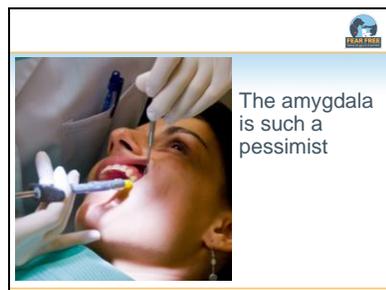


- Anxiety is a nervousness about what might happen. There is no specific trigger. "Entering the dark ally caused her to be anxious."
- Fear is to be afraid and worried and is in response to a specific threat. "When I saw that the people at the end of this dark alley were carrying guns, I became very afraid."
- Fear can be in response to something painful or disturbing. Painful could

include getting a flu shot or blood draw, being stung by a bee, or hitting your finger with a hammer. Examples of disturbing includes see someone being beaten up, witnessing a fatal car crash, seeing the body of a little Syrian boy floating in the waters of Greece.

- Fear can be life-saving in the mode where you are f'd: Fight, flight, fidget, freeze.
- When fear is bad is when it becomes maladaptive fear. Then you have even more anxiety and fear in response to the same set of circumstances, not even having to experience them.

Slide 7



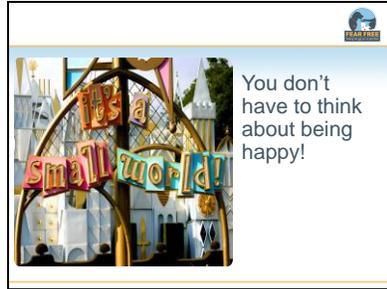
- It is just a small, almond-shaped body part that is situated in the front of the brain's temporal lobe. Scientists have always associated the amygdala with negative, primal behaviors, such as fear and rage. However, researchers at the University of Pennsylvania found that the unique collection of nuclei can help to promote positive social behavior, such as kindness and charity, making them better understand autism and anxiety too.

- Once something is in the amygdala, it never leaves. That's when I gave my son the "talk" at about age 10, I told him if a female ever asks you, "Do I look fat in this?" your response is never, "Yes."
- I remember getting my knee crushed in football, my heart broken by a girl in college, facing a youth mob in Spain, my Granddaughter with RSV virus, my wife sobbing.

Slide 8

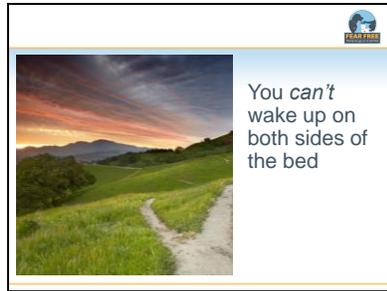


- Let's pretend this is your pet. Notice that she only has one eye? Probably can't tell that she also has a missing leg. Would you rather your pet has permanent physical damage, or permanent emotional damage?
- Emotional damage is so much worse. Extreme separation anxiety. Noise phobias. Extreme anxiety, fear and stress going to the veterinary hospital.



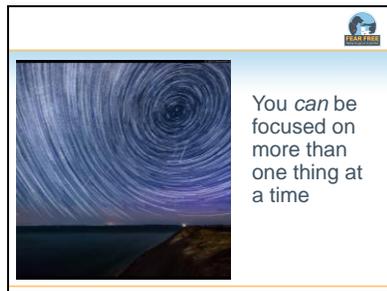
- Humans don't have to think about smiling, nor do dogs to wag their tails or cats to purr. When we're happy, the corners of our mouths turn up, a dog's tail starts moving from side-to-side and the cat's diaphragm starts that 25x/min percussion.
- What makes humans happy? Being at Disneyworld with a child or grandchild. School plays. Snow days. Grandma's favorite dish and fishing with grandpa. Ice cream and chocolate. Candy stores, toy stores. Family reunions or not. 😊
- One thing to think about is that postures change emotions. Smiling has been shown to increase positive emotions. Wonder Woman pose increases confidence (book *Presence* by Harvard professor).
- It's what we talk about as in having a "happy childhood," a "happy marriage," living in a "happy home," and "loving what you do at work."

Slide 10



- This was one of my Dad's favorite sayings. For example, you can't "love your neighbor as yourself," but ignore the hobo that lived in an old school bus near our family farm. We didn't.
- In animal shelters, community outreach, and veterinary medicine, you can't proclaim "We Care For Pets...and People" and then ignore the emotional trauma that we know we've been causing.
- Simply put, you're going to choose the upper path, that will require acceptance, training, commitment, compliance, focus and fervor. It's not the easiest path, it requires acquiring a new skill set to be learned and implemented, but it's going to take you to the "sunshine side of the mountain."

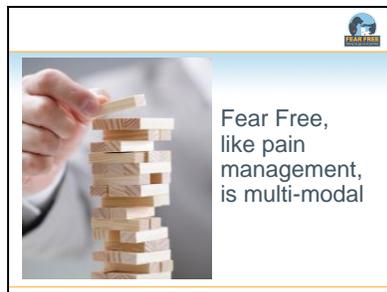
Slide 11



- I've followed a North Star my entire career: To celebrate, protect and nurture that special affection-connection between pets and people we call The Bond.
- But I've also explored and shared the human-animal health connection or "healing power of pets" to make and keep people happy and healthy.
- Now there's a new star in the sky; the emotional wellbeing of pets and pet owners. Think of it like a new disease that's been discovered that affects practically every pet. Learn the symptoms, learn the proven treatment plans

and always have it in your peripheral vision.

Slide 12



- I was taught in veterinary school 1976-1980 that pets didn't feel pain, and if they did, it was a good thing because it kept them immobile. We know now that that train of thought was completely bogus. That pets have the same neural pathways as humans very much experience pain.
- Once we accepted pet pain as real, and damaging, we worked to prevent it from occurring and treat it if it occurred. We embraced a multimodal model of pain treatment. For example, with hip dysplasia, we might use a powerful analgesic, joint supplements, joint diets, products to improve joint health (Adequan), laser treatment, stem cells, physical therapy, etc.
- Fear Free, too, is multimodal. It might include reducing visual stimuli for the pet, using pheromones, playing calming music, giving chill pills or prescription sedatives, new Gentle Control techniques, etc.

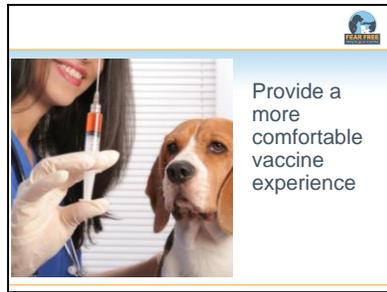
Slide 13



- When I was a little kid, I remember getting shots with a needle that looked like the tailpipe on a 57 Chevy. When I cried I got the following words, “SHUT UP MARTY!” I, like many of you, was part of the human hell-care system of the 1950’s and 60’s when we as the dependent beings in healthcare, children, were manhandled manipulated, threatened and abused. Our opinions were not asked nor was our comfort a concern.
- When my six-year-daughter, Reagan, first started getting vaccinations, the only positive was letting her pick out the image of Bandaid.
- Now when she has blood drawn or is vaccinated for overseas travel, they use distraction and the promise of a really tasty treat such as a “Cake Pop,” deluxe

sucker or box of animal cookies.

Slide 14



- For 30-years, I was a veterinary Darth Vader. Who wielded his light saber to frighten and attack. I wielded my needle and syringe full of vaccine to project authority and protect the pet.
- I would draw the vaccine up in front of the pet owner, tapping the syringe to get rid of those deadly bubbles and even squirt out a little vaccine for emphasis. Meanwhile the pet would be watching the display like seeing a six-inch-long bee stinger coming right at them.
- The last 7-years, we have providing a more comfortable vaccine experience. We use Boehringer Ingelheim's ½ volume injectable vaccine line and oral Bordatella vaccine. We use two needles (one to draw up the vaccine and a new one to deliver it), we give the vaccine using distraction, desensitization, dimple and delivery.



- There are other things we've routinely done in veterinary medicine that showcases for all to see the very worst of emotional trauma that we inflict upon pets. Nail trims and blood draws. I'm going to add vaccinations, as that's something shelter team members do a LOT of, both in their shelter and in community outreach programs.
- The typical nail trim involves about 500 lbs. of veterinary team members holding down a 20 lb. dog. The dog --- being in the Flight or Fight mode --- has superhero strength --- and fights for her life. Glands are expressed, bladders emptied, bowels evacuated as the dog struggles to breathe with gauze or a muzzle tightly around the snout. Imagine if you went to a zoo and witnessed this being done to a wild animal?
- When it comes time for phlebotomy, we have a) a rookie, or b) someone who's not very good at the task at hand attempt over and over, vein by vein, sometimes limb by limb to find a "good vein" to draw blood.

Slide 16



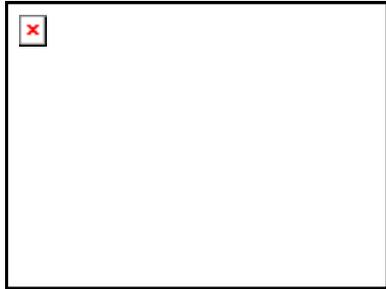
- In my veterinary school training (1976-1980), I was taught how to restrain horses, cattle, pigs, dogs, cats, birds, even primates. Restraint was designed to prevent movement and protect us at all costs.
- I think today, restraint is a very poor word and attitude to have. In Fear Free we like to use the words less-stress handling or Gentle Control.
- We now know that dogs wag their tails higher to the right when greeting their owners and people they know very well. When dogs wag their tails to the right, they are engaging the muscles on the right side of their body more actively than those on the left. The left hemisphere is activated when the brain is processing positive experiences associated with emotions such as happiness, affection and excitement, as well as anything familiar. The right hemisphere takes precedence when processing sadness, fear and other negative emotions and novel situations.

Slide 17



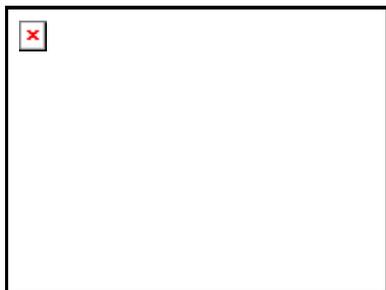
- I've been in so many veterinary hospitals where the top small cages were filled with towels, paper towels and supplies like IV fluids. The cats were in middle, even lower cages, to their detriment.
- Cats occupy a weird ecological niche where they're both predator and prey. In that dual mode, they like to be up high to either look for supper or be safe from being someone else's supper.
- Dogs in nature, are never elevated off of their feet and put up on a surface that is slippery. As such, most dogs like to be examined on the floor or in a lap (unless they've been conditioned to be on top of the exam room table).

Slide 18



- Yes, it's harder for me to get up and down off of the floor (I had knee surgery in 2015) but I'd crawl on my hands and knees across shards of broken glass if it meant giving the pet the best experience possible.
- In the future I might have to abdicate some of these types of exam for those that are more flexible, less sore and hungrier. ☹️
- I want these dogs to think I'm wearing "Bone Cologne" or underwear made out of "Beggin Strips."
- We've found these dogs to literally paw at the door or push it open on subsequent visits to get inside where all the "good things happen!"

Slide 19



- Try telling a diabetic that needle size doesn't matter. Or let me give you vaccinations for overseas travel with a small gauge needle or a needle designed to drain an abscess on a horse.
- Before Fear Free, I would display the needle and syringe like a Light Saber in Star Wars. I, the veterinarian, was all powerful and only I could inject this amazing life-saving liquid into just the right spot on the pet. I was wrong. So wrong. I might have seen the delivery of a high-tech product as

something to showcase but the pet saw it as a “weapon of ass destruction” to be plunged into their rump.

- With Fear Free we use two needles. The first to mix and draw out the vaccine (used two to four times) and a smaller, new needle to deliver the vaccine into the pet.
- The pet never sees the needle/syringes because they’re hidden under a pheromone impregnated towel.

Slide 20



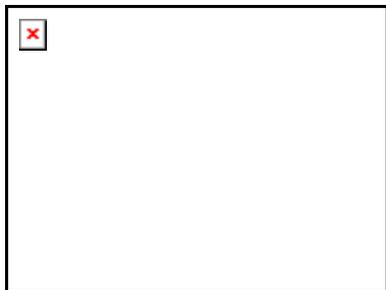
- On the human side, they’re using a lot of spray lidocaine to freeze and deaden.
- We can’t use the spray cans in vet med because of the disturbing sound, but I’ve found Lidocaine/Prilocaine cream works very well.
- We use the product before venipuncture, vaccinations, injections of antibiotics and other products, examining a torn nail or other sensitive area.

Slide 21



- I took it upon myself to talk with about a dozen phlebotomists at four different hospitals. I learned a lot with some surprises.
- Women are much better at needles than men.
- Newer protocols have the phlebotomist asking the person if they want to watch the procedure or look away. About 80% choose to not watch the needle go in.
- Besides using local anesthetics, they desensitize the area by rubbing it with a gauze sponge.
- They encourage those that are more nervous to squeeze a ball or hum a song that almost everybody knows.

Slide 22



- I can't emphasize enough, that tasty treats aren't the only reward we can give pets.
- They also crave physical touch whether it's a Zoom Groom or Groom Genie on the side of the neck, chest or base of the tail, therapeutic massage or knowing so called "Valium points."
- When vaccinating we always use at a minimum, both distraction and desensitizing techniques.



- We have ton of tasty treats for cats including tuna, fresh chicken, deli turkey, bacon, turkey hotdogs, Gerber Graduate Meat Sticks, Vegemite and EasyCheese.
- Feline specialist Dr. Ilona Rodan tells owners to not feed their cat at least for a few hours prior to the veterinary appointment. This prevents car sickness, and the cat will then take treats while at the vet. In her experience in practice, about 80-85% of the cats will eat treats or canned food at the clinic. This is another positive experience which is the goal - prevent fear through familiar and positive experiences!"
- Rodan, who is board certified in feline practice a member of the Fear Free advisory panel and co-chair of the AAFP Cat Friendly practice also recommends using Feliway and bring the cats to the vet in their favorite bedding or the owner's unwashed sweatshirt that smells like home. If the cat is hospitalized bring all of the cat's favorites (just not huge items).

Slide 24



1) This Newfoundland puppy had just gotten his vaccinations and was lowered off of the hydraulic table. He went over to the area where the vaccines had been hidden and was sniffing and licking the counter trying to find more treats.

Slide 25



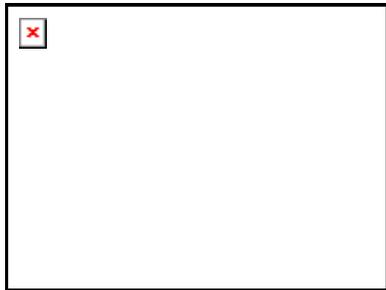
- Deaden by using Lidocaine/Prilocaine topically
- Distract by using a tasty treat, giving a retriever a tennis ball, massage or a Kong-sicle.
- Desensitize by using topical anesthetics or scratching the skin or rubbing the skin in a circular motion. I've found that less is better.
- Dimple is to pinch the skin a little bit in the spot you want the needle to puncture the skin.
- Deliver the vaccine/antibiotics slowly.

Slide 26



- In veterinary school I was taught restraint.
- Restraint is a measure or condition that keeps someone or something under control or within limits. It is designed to protect “us!” We cast a horse, hog tie a porcine or put a bovine in a squeeze chute.
- Let’s instead embrace Gentle Control which is designed to protect the pet.

Slide 27

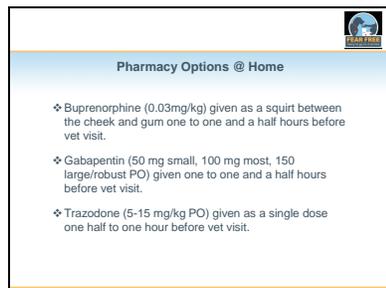


- “If you can’t abate (the anxiety or fear) you must sedate.”
- So many pets are forced through procedures while expressing tonic immobility and labeled as “did great” or “excellent patient!” Clinicians may not view them as stressed due to bradycardia.
- Resilience is very popular word according to a story in the New York Times Magazine (Dec 6, 2015). We have an ancient attraction to stories of resilience (myth of the Phoenix), but recently the word itself has achieved a more prosaic popularity. Deriving from the Latin for “to jump again,” “resilience” has sprung into new life as a catchword. We’ve seen hundreds of books published on the subject in 2015 and we’ve seen encomiums to the resilience of Paris after a terrorist attack or to Justin

Bieber, after his weepy comeback performance at the MTV Video Music Awards. As a profession, we've mistakenly believed that pets were perhaps the most resilient of all.

- With Fear Free, board certified veterinary behaviorist Dr. Lisa Radosta says, "You must have the knowledge of science, the skill of recognition and response, medications to overcome the neurochemistry with situations can't be controlled and the commitment of belief that is unshakable."

Slide 28

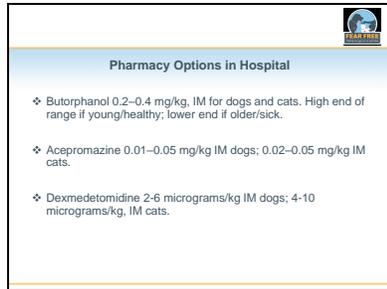


Pharmacy Options @ Home

- ❖ Buprenorphine (0.03mg/kg) given as a squirt between the cheek and gum one to one and a half hours before vet visit.
- ❖ Gabapentin (50 mg small, 100 mg most, 150 large/robust PO) given one to one and a half hours before vet visit.
- ❖ Trazodone (5-15 mg/kg PO) given as a single dose one half to one hour before vet visit.

- Start with Butorphanol 0.2 - 0.4 mg/kg, IM DOGS & CATS (high end of range if young/healthy, lower end of range if older/sick). Butorphanol is an opioid with mild analgesia and good sedation. May be all that is needed with older/sick patients.
- With or without:
Acepromazine or
Dexmedetomidine:
Acepromazine 0.01 - 0.05 mg/kg, IM
DOGS
Acepromazine 0.02 - 0.05 mg/kg, IM CATS -OR-
Dexmedetomidine 2 - 6 micrograms/kg, IM DOGS;
Dexmedetomidine 4 - 10 micrograms/kg, IM CATS
- Trazodone – 10 mg for the smallest 2-5 lb. dog and up

to 300 mg for the 100 lb. plus patients. Pre-hospital sedation: Gabapentin 10 - 20 mg/kg, PO - CATS 1.5 - 2 hours prior to arrival. Typically 100 mg per cat, 50 mg if small cat, 150 mg if robust/large cat OR Oral transmucosal buprenorphine 0.03 mg/kg, CATS 1 - 1.5 hours prior to arrival. Note about fearful cats: Medication options are only a PART of the approach (environment, handling are CRITICALLY important pieces - see Cat Friendly Practices training, etc). Very fearful cats are patients that really benefit from pre-hospital sedation/analgesia. Do not rely on the pre-hospital medication(s) to make them very sedate - these medications will take the "edge" off of their fear. Upon arrival at the hospital, escort these fearful cats to a quiet, dark room with Feliway-spritzed towels. Sedate them with IM or SC combination of medications.



Pharmacy Options in Hospital

- ❖ Butorphanol 0.2–0.4 mg/kg, IM for dogs and cats. High end of range if young/healthy; lower end if older/sick.
- ❖ Acepromazine 0.01–0.05 mg/kg IM dogs; 0.02–0.05 mg/kg IM cats.
- ❖ Dexmedetomidine 2-6 micrograms/kg IM dogs; 4-10 micrograms/kg, IM cats.

- Start with Butorphanol 0.2 - 0.4 mg/kg, IM DOGS & CATS (high end of range if young/healthy, lower end of range if older/sick). Butorphanol is an opioid with mild analgesia and good sedation. May be all that is needed with older/sick patients.
- With or without:
Acepromazine or
Dexmedetomidine:
Acepromazine 0.01 - 0.05 mg/kg, IM DOGS
Acepromazine 0.02 - 0.05 mg/kg, IM CATS
-OR-
Dexmedetomidine 2 - 6 micrograms/kg, IM DOGS
Dexmedetomidine 4 - 10 micrograms/kg, IM CATS
- Trazodone – 10 mg for the smallest 2-5 lb. dog and up to 300 mg for the 100 lb. plus patients.
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