

# Common Gynecologic Conditions in Adolescent Girls

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# Objectives



- Be able to identify common gynecologic conditions in adolescent girls
- Be able to evaluate common gynecologic conditions in adolescent girls
- Be able to treat and manage common gynecologic conditions in adolescent girls

# Introduction



Adolescent: a young person who has begun puberty but has not yet become an adult

*“What do you call 60yo who hasn’t reached puberty? A late boomer.”*

# Dysmenorrhea





# Dysmenorrhea



# Primary Dysmenorrhea

## Definition

- Painful menstruation (menstrual cramping) in the absence of pelvic pathology -
- Begins when adolescents attain ovulatory cycles, within 6-12 months of menarche
- Pathophysiology related to prostaglandins and leukotrienes

## Prevalence

- Range from 50%-90% of adolescent girls and young women

## Associated Symptoms

- Nausea
- Vomiting
- Diarrhea
- Headaches
- Muscle cramps
- Poor sleep quality

# Dysmenorrhea: Primary versus Secondary

## Evaluation

- **History:** medical, gynecologic, menstrual, family and psychosocial
- Pelvic exam NOT necessary if only primary dysmenorrhea suspected
- Cultural differences in attitudes about menses may affect how comfortable patient is with discussion of menstrual-related symptoms

## Suspect secondary if

- Symptoms suggest STI
- Severe dysmenorrhea immediately after menarche
- Progressively worsening dysmenorrhea
- Abnormal uterine bleeding: both heavy menstrual bleeding and irregular bleeding
- Lack of response to empiric medical treatment
- Family history of endometriosis

# Treatment of Primary Dysmenorrhea

## Nonsteroidal Antiinflammatory Agents

- Interrupts cyclooxygenase-mediated prostaglandin production
- Most effective when started 1-2 days before onset of menses and continued through the first 2-3 days of bleeding
- Taking with food and increased fluid intake may decrease GI and renal adverse effects

## NSAIDs Dosage

- Ibuprofen: 800mg initially, then 400-800mg Q8h prn
- Naproxen sodium: 440-550mg initially, then 220-550mg Q12h prn
- Celecoxib: 400mg initially, then 200mg Q12h prn



# Treatment of Primary Dysmenorrhea

## Hormonal Agents

- Can be used if NSAIDs do not provide adequate relief OR as a first-line option
- Mechanism likely prevention of endometrial proliferation and/or ovulation, thus decreasing prostaglandin and leukotriene production
- Continuous regimens may give more rapid onset of pain reduction

## Hormonal Agents

- Oral contraceptive pills,
- Contraceptive patch or vaginal ring,
- Single-rod contraceptive progestin implant,
- Depot Provera IM or SQ ,
- levonorgestrel-releasing intrauterine system (LNG-IUS), continuous norethindrone 5mg (norethisterone acetate)

## Complementary & Alternative Therapies

- Modification of diet, exercise, yoga
- Dietary supplements: fenugreek, ginger, fish oil, vitamin B1
- Smoking cessation
- Acupuncture
- Heat treatment

# Secondary Dysmenorrhea

## Further Evaluation

- Painful menses due to pelvic pathology or a recognized medical condition
- Warranted if pain lasts for 3-6 months despite empiric treatment
- Focus history on familial, GI, urologic, musculoskeletal, and psychosocial etiologies
- Consider a pelvic exam
- Consider a pelvic ultrasound

## Pelvic Examination

- **Endometriosis**
- Obstructed reproductive tract anomaly
- Enlarged/irregularly shaped uterus
- Cervical friability or discharge (PID)
- Pelvic masses (ovarian cysts)

## Pelvic Ultrasound

- Obstructive reproductive tract anomaly
- Uterine myomas (fibroids)
- Adnexal masses (endometriomas)

# Hyperandrogenic Adolescent

## Definition

- Most common and recognizable symptoms are **hirsutism** and **acne**.
- Hirsutism: excessive terminal hair growth in a adult male distribution (face, sternum, lower abdomen, back and thighs)
- No clear consensus guidelines on diagnostic criteria for PCOS in adolescent girls within 2 years of menarche

## Prevalence

- Polycystic ovarian syndrome (PCOS) is the most common cause of persistent hyperandrogenism beyond early puberty
- PCOS estimated to affect 6-15% of reproductive age women
- Hirsutism affects 5-10% of reproductive-aged females
- Acne vulgaris affects as many as 90% of all adolescents

## Associated Symptoms/ Differential Diagnosis

- Alopecia
- Physiologic hyperandrogenism of puberty
- Idiopathic hyperandrogenism
- PCOS
- Nonclassic congenital adrenal hyperplasia
- Hypothyroidism
- Androgen-secreting tumors
- Cushing disease
- Severe hyperprolactinemia

# Hyperandrogenic Adolescent

## Evaluation

- **History:** age of thelarche, adrenarche, menarche, hair removal techniques, menstrual history, use of anabolic steroids/testosterone, menstrual history (frequency/duration), timing and progression of acne/hirsutism (with record of prior treatments)
- If obesity present, timing and progression of weight gain
- Family history of hirsutism, severe acne, PCOS, or obesity
- Determine the degree to which acne or hirsutism bothers the patient

## Evaluation

- **Physical Exam:**
- BMI
- Blood pressure
- Skin evaluation: hirsutism, acne severity, acanthosis, skin tags
- External evaluation of genitalia

## Evaluation

- **Lab Values:**
- Regular menses: Free/total testosterone, DHEAS (dehydroepiandrosterone sulfate), 17OHP (hydroxyprogesterone)
- Irregular menses: LH, FSH, Prolactin, TSH, Free/total testosterone, DHEAS, 17OHP

# Hyperandrogenic Adolescent

## Evaluation

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# Hyperandrogenic Adolescent

## Subtitle

- Add text, images, art, and videos.
- Add transitions, animations, and motion.
- Save to OneDrive, to get to your presentations from your computer, tablet, or phone.

## Subtitle

- Open the Design Ideas pane for instant slide makeovers.
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# Secondary Dysmenorrhea

## Definition

- Painful menses due to pelvic pathology or a recognized medical condition
- The most common cause of secondary dysmenorrhea:  
**Endometriosis**

## Other Causes

- Ovarian cysts
- Obstructive reproductive tract abnormalities
- Pelvic Inflammatory Disease
- Uterine leiomyomas
- Cervical stenosis
- adenomyosis

# Secondary Dysmenorrhea

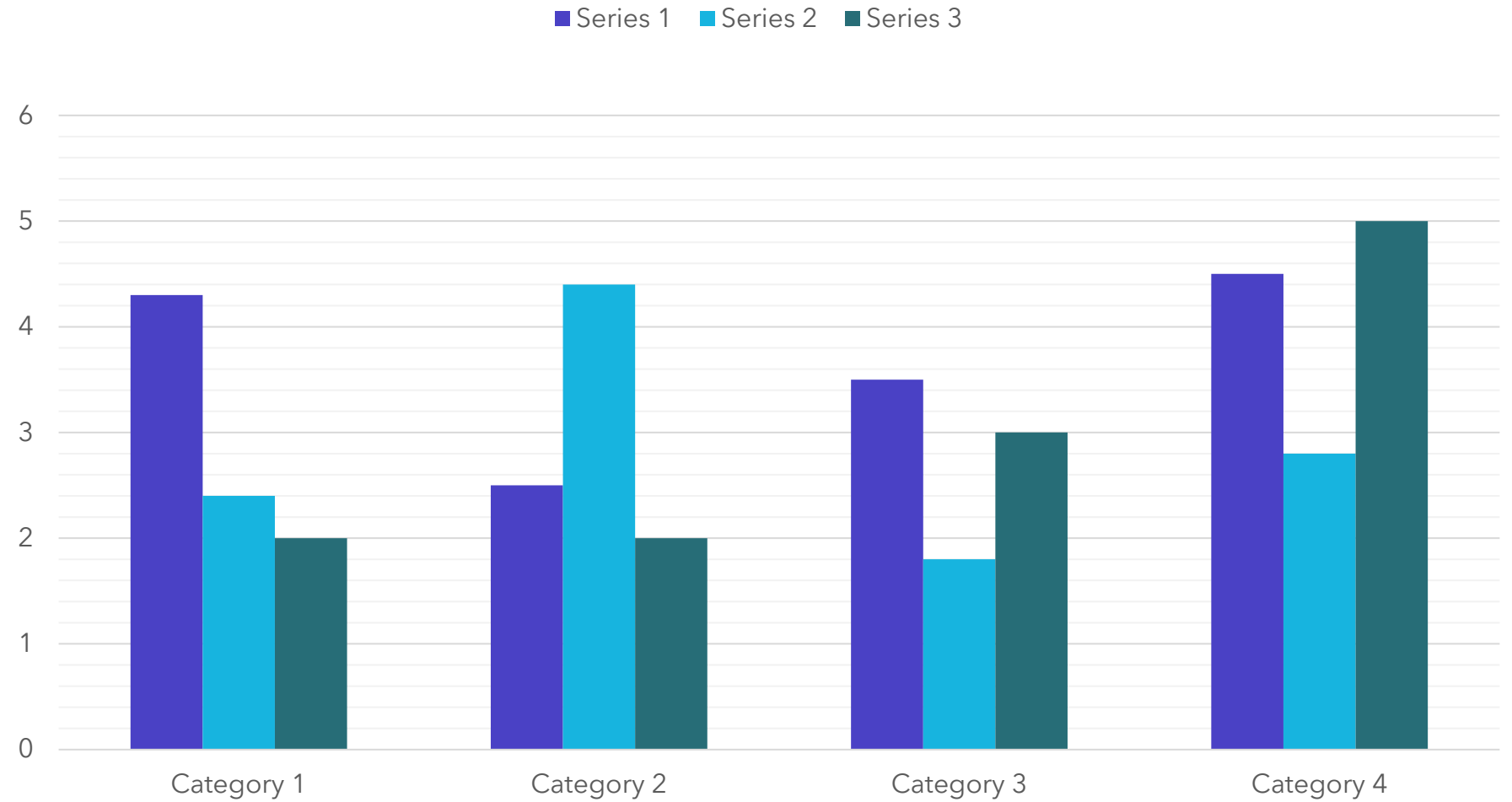
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# Chart

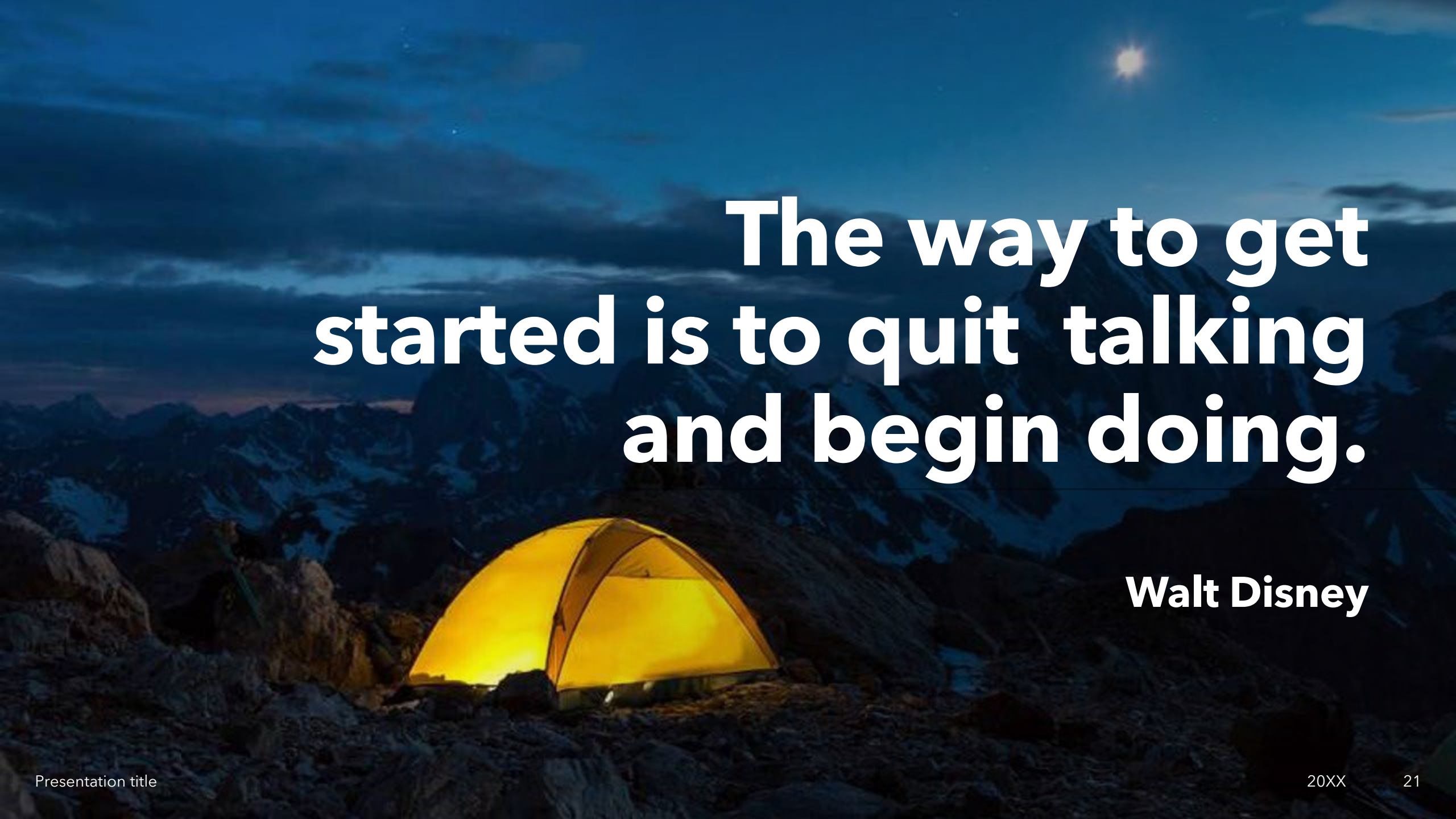






# Table

	Category 1	Category 2	Category 3	Category 4
Item 1	4.5	2.3	1.7	5.0
Item 2	3.2	5.1	4.4	3.0
Item 3	2.1	1.7	2.5	2.8
Item 4	4.5	2.2	1.7	7.0

A glowing yellow tent is pitched on a rocky mountain peak at night. The tent is illuminated from within, casting a warm yellow light. The background shows dark, rugged mountain ranges under a deep blue night sky with a few stars and a bright moon in the upper right corner.

**The way to get  
started is to quit talking  
and begin doing.**

**Walt Disney**

# Team



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# Timeline

## Title

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# Treatment of Dysmenorrhea

## Hormonal Agents

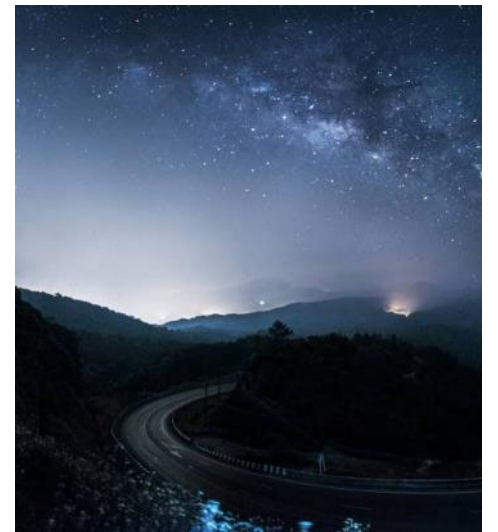
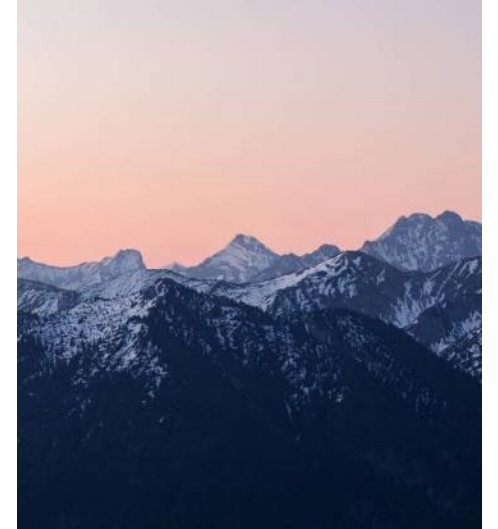
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# Summary

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